

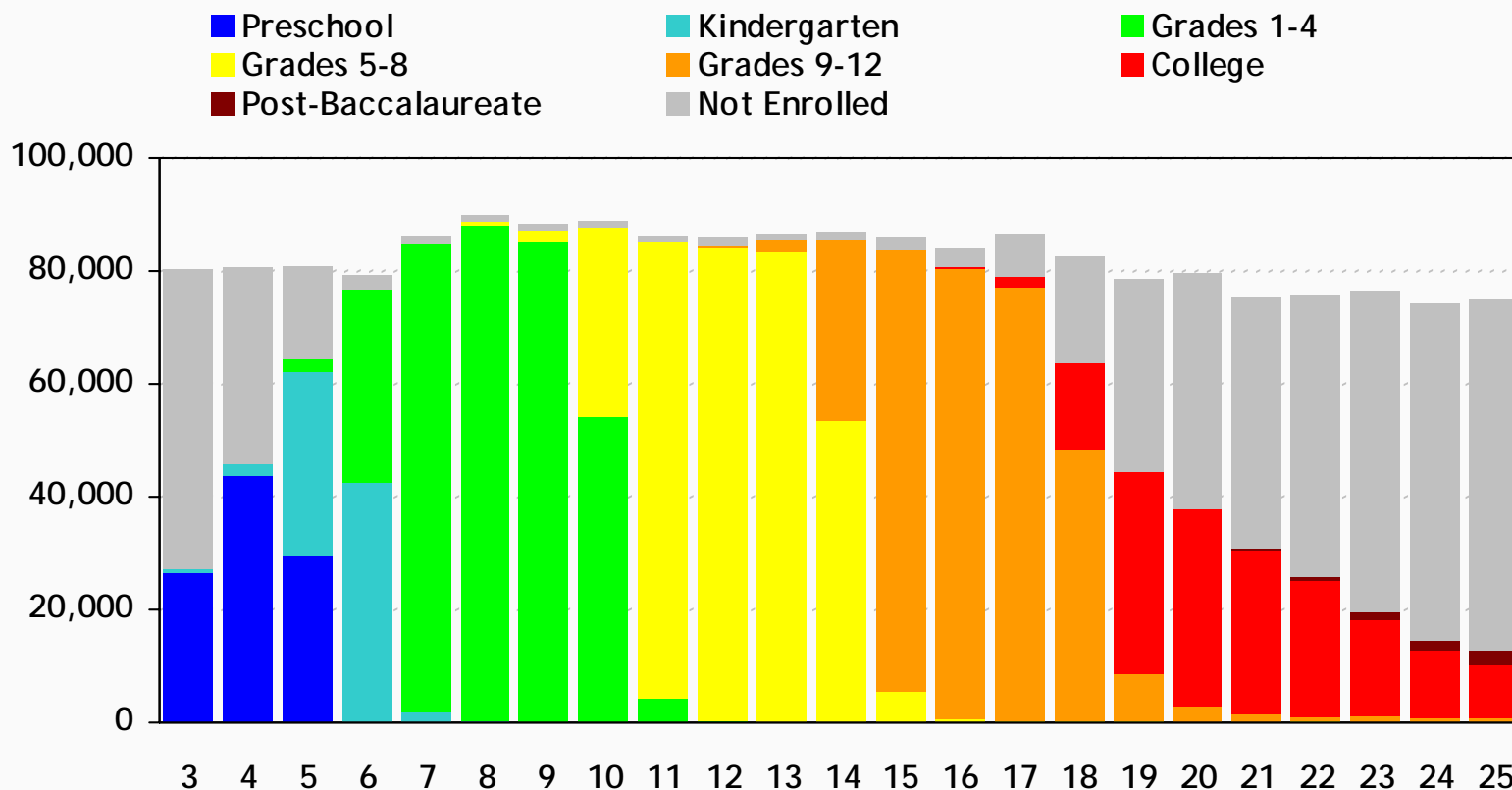
Washington's Education Pathways

Presentation to the Steering Committee

October 10, 2005

P-16 Model

- A comprehensive, integrated approach to education from preschool through college



Source: Education Commission of the States. *The Case for P-16: Designing an Integrated Learning System, Preschool Through Postsecondary Education*. [www.ecs.org/clearinghouse/34/99/3499.pdf] Chart data from Census 2000.

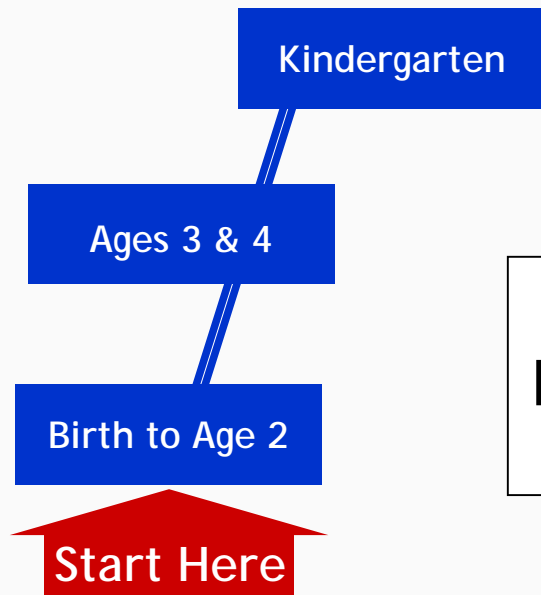
Examples of P-16 Goals

- Children are ready to enter school at age 5.
- Students acquire basic literacy/reading proficiency by the 3rd grade.
- All 8th graders demonstrate a basic understanding of geometry and algebra.
- Advanced students complete high school at grade 10. Students have the option of enrolling in dual-credit or career-academy programs.
- K-12 and higher education are linked via a framework that simplifies the admissions process and better uses grades 11 and 12, allowing customized learning approaches responsive to the interests of individual students.

Source: Education Commission of the States. *The Case for P-16: Designing an Integrated Learning System, Preschool Through Postsecondary Education*. [www.ecs.org/clearinghouse/34/99/3499.pdf]

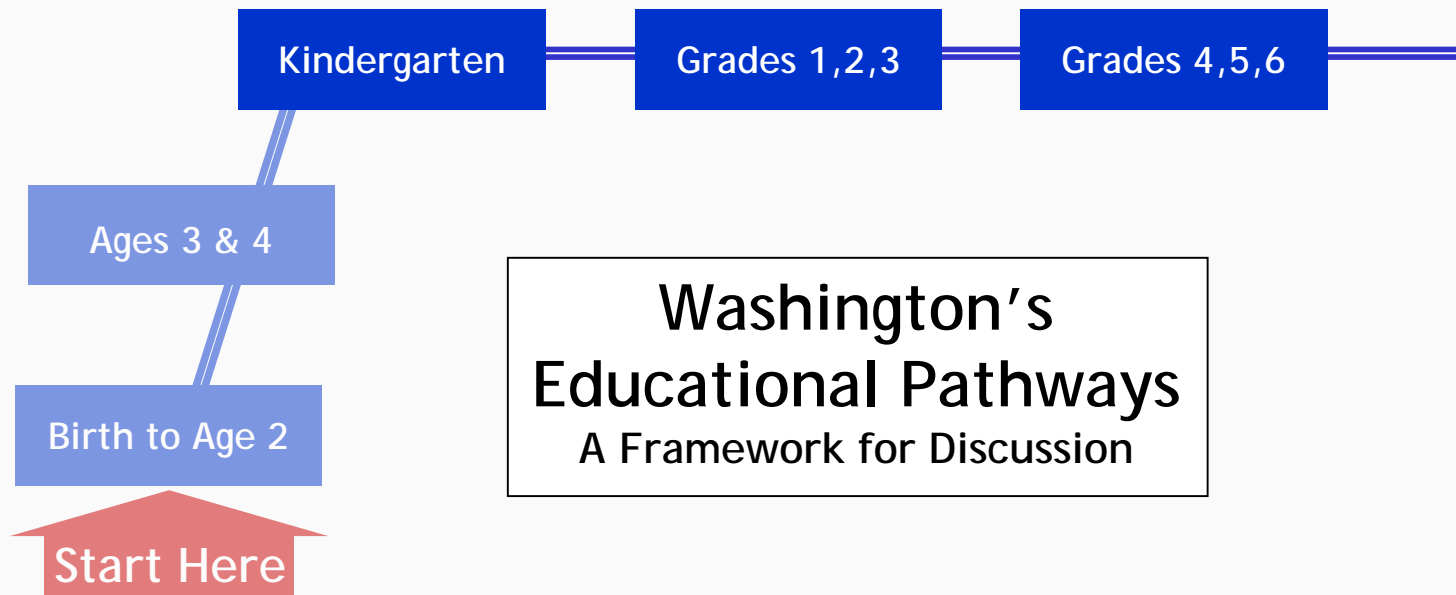
Pipelines and Pathways

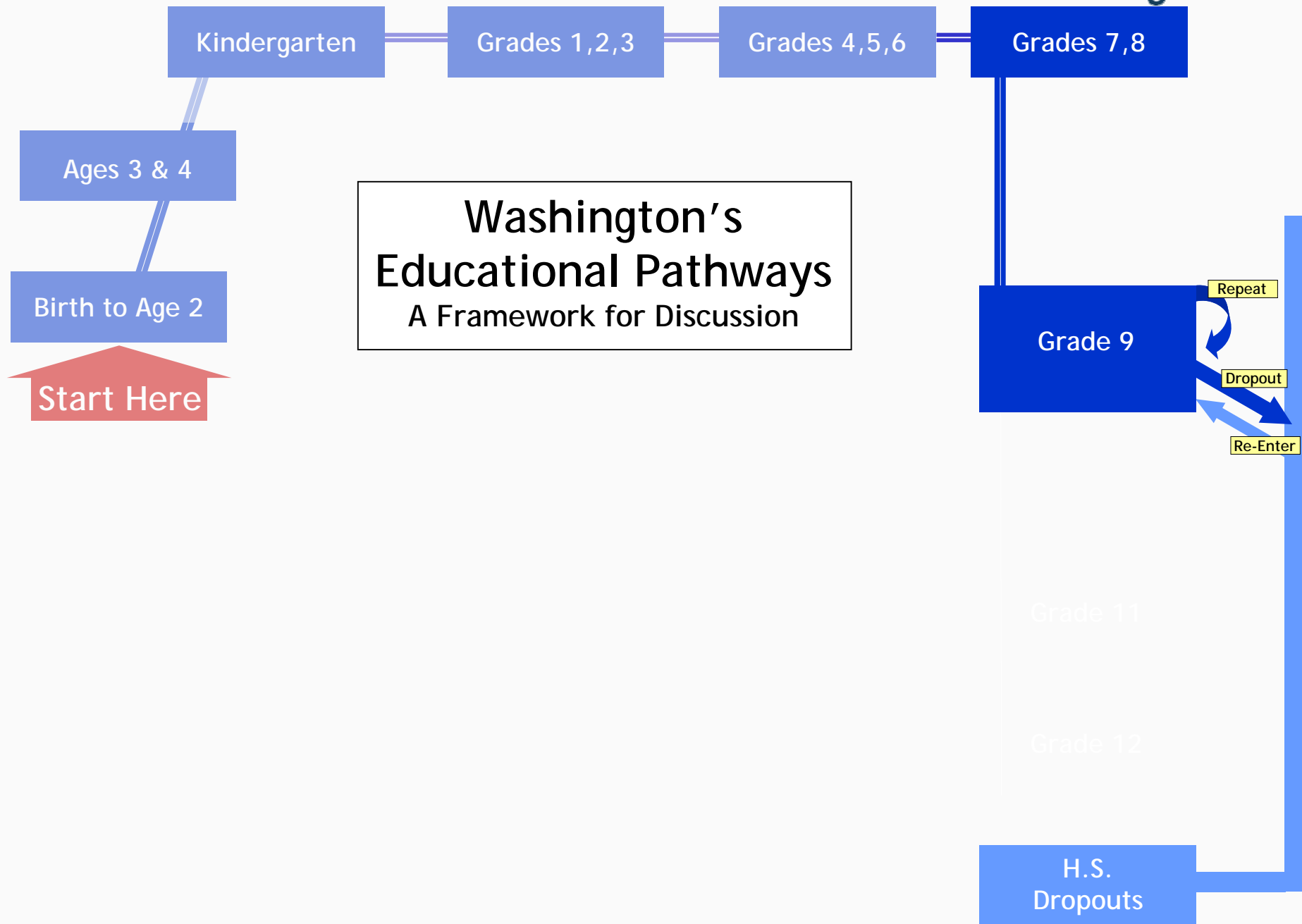
- P-16 concept traditionally focuses on the educational “pipeline”
 - Often a narrow definition of educational progress (academic track)
- Educational “pathways” broader concept, including
 - Traditional academic track to baccalaureate and beyond
 - Career and technical education
 - Re-entry of adult learners

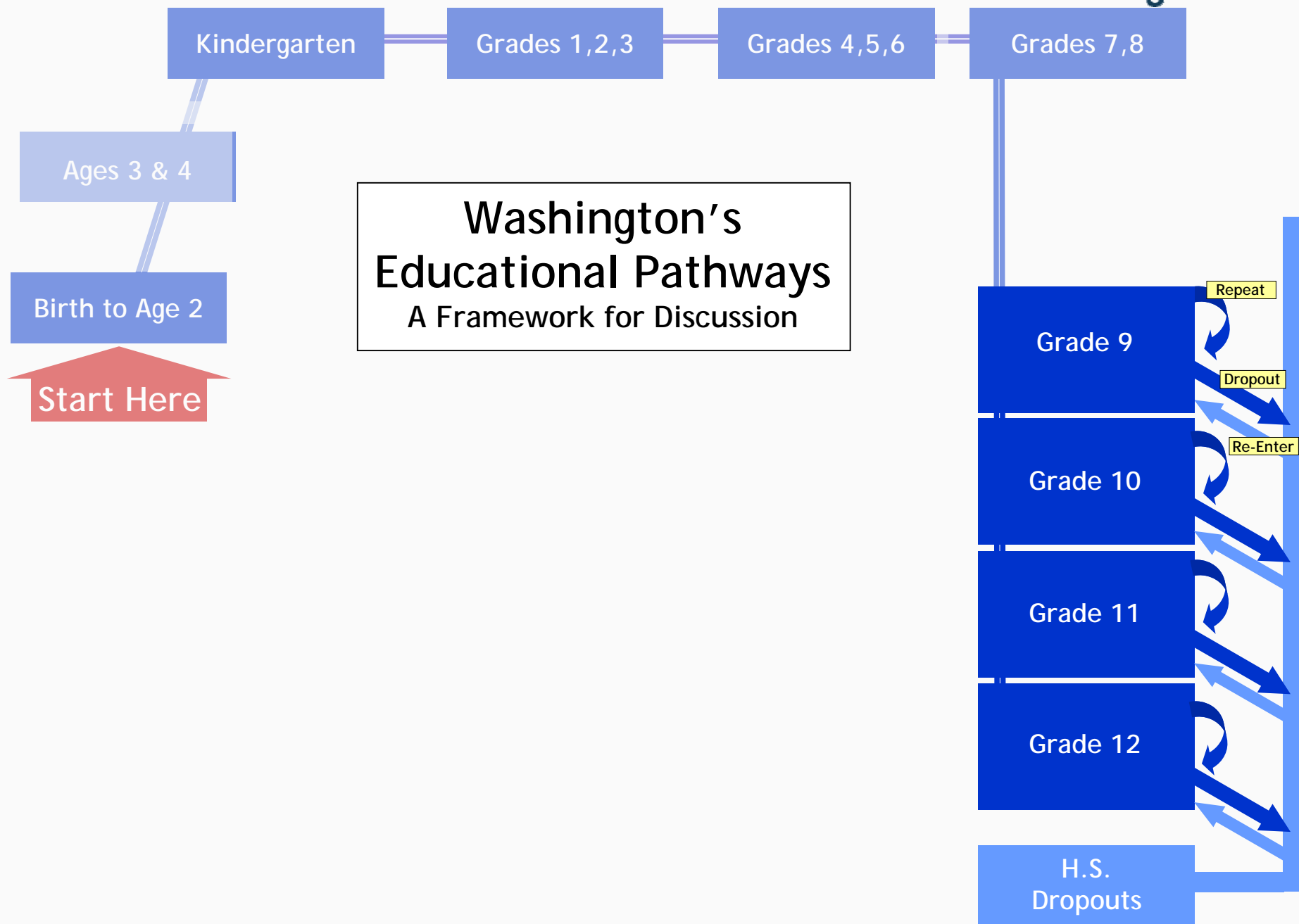


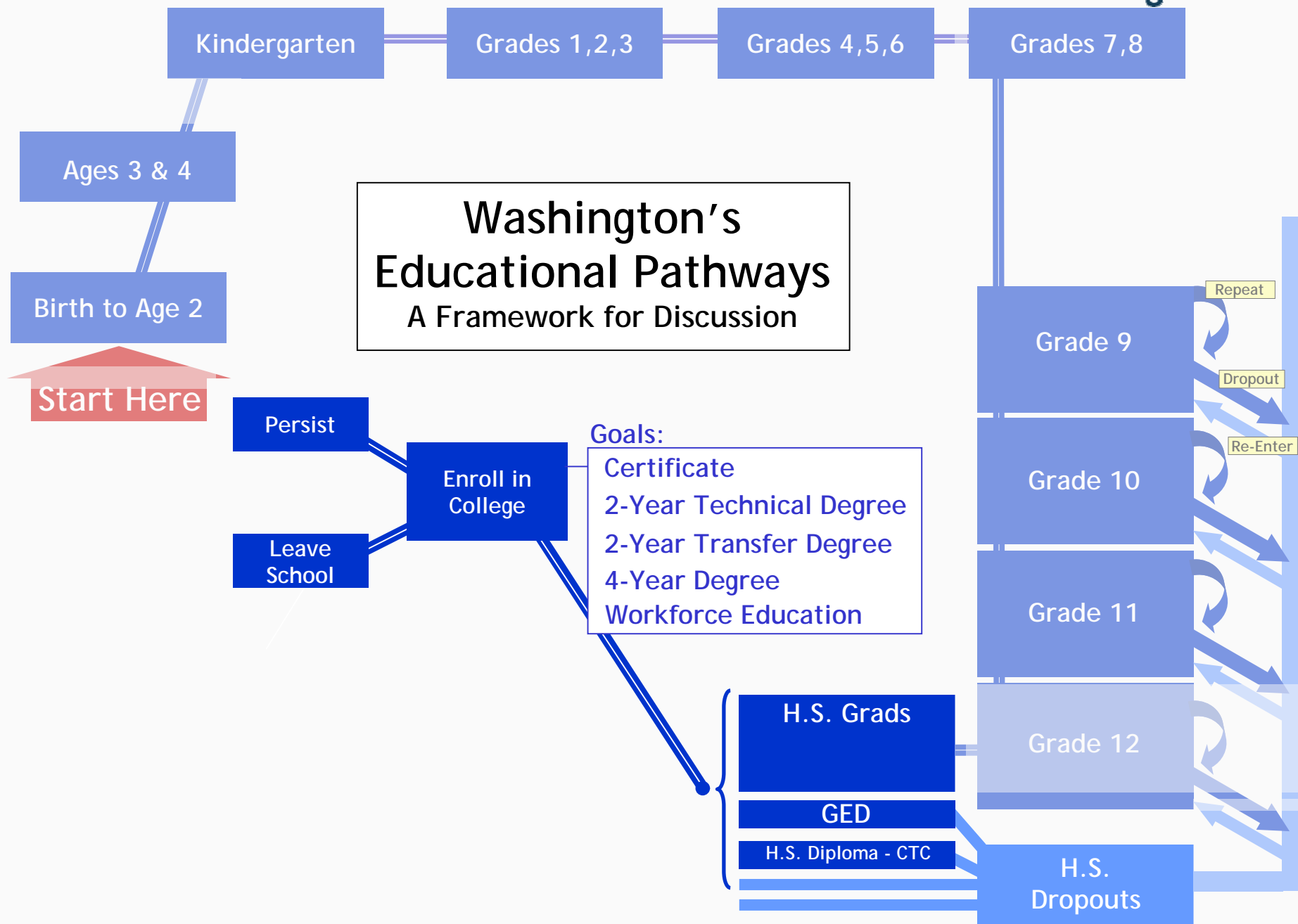
Washington's Educational Pathways

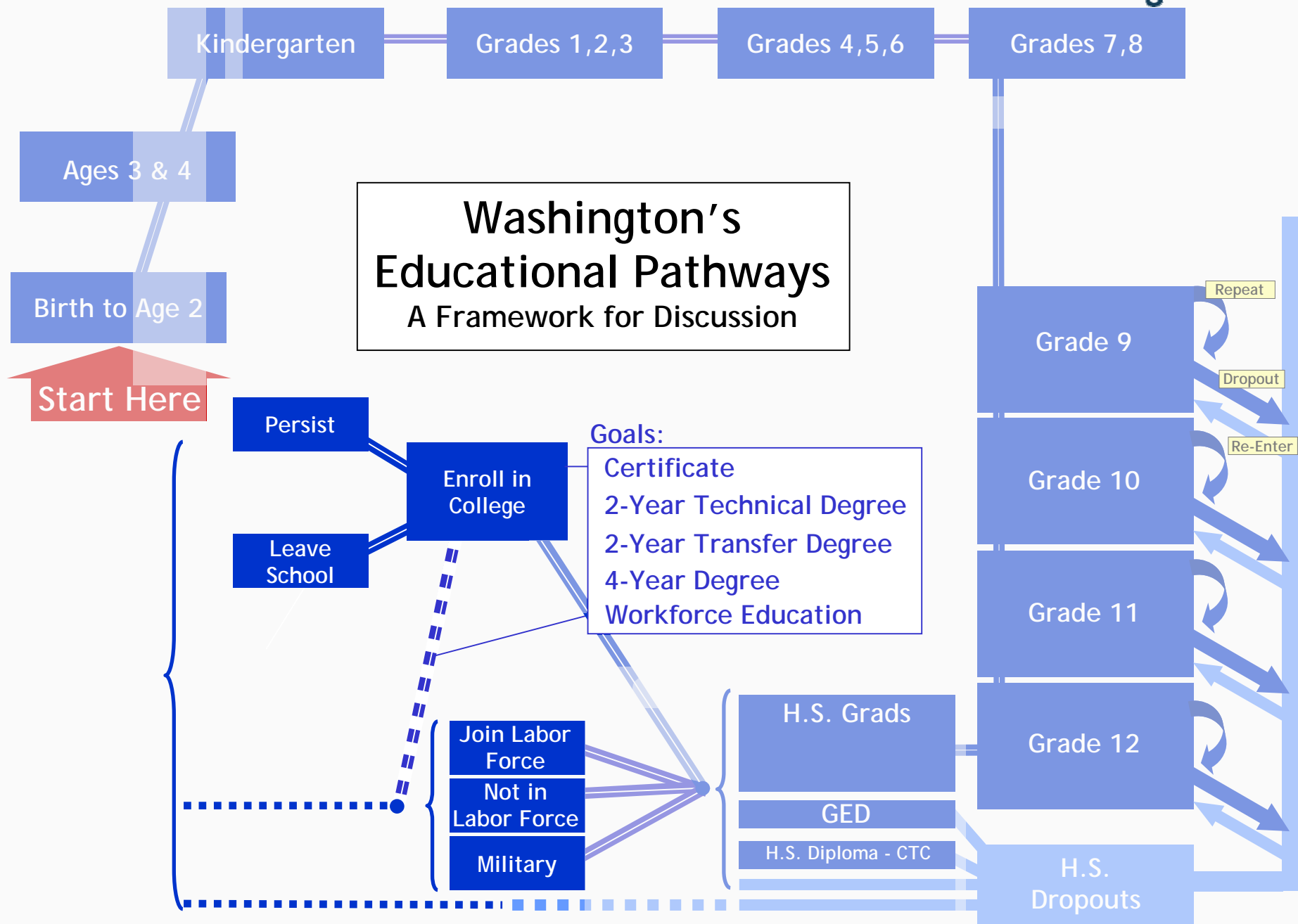
A Framework for Discussion

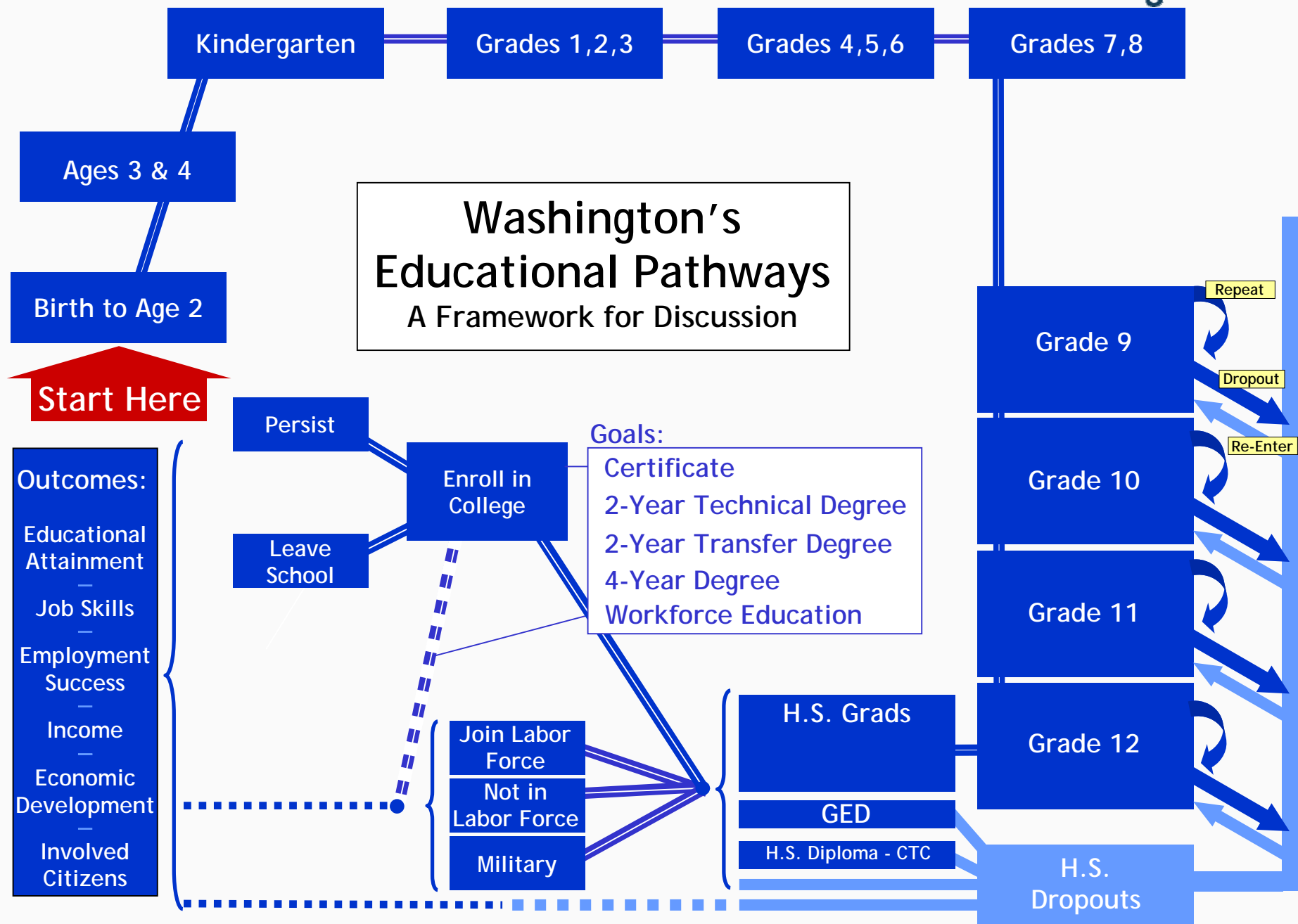


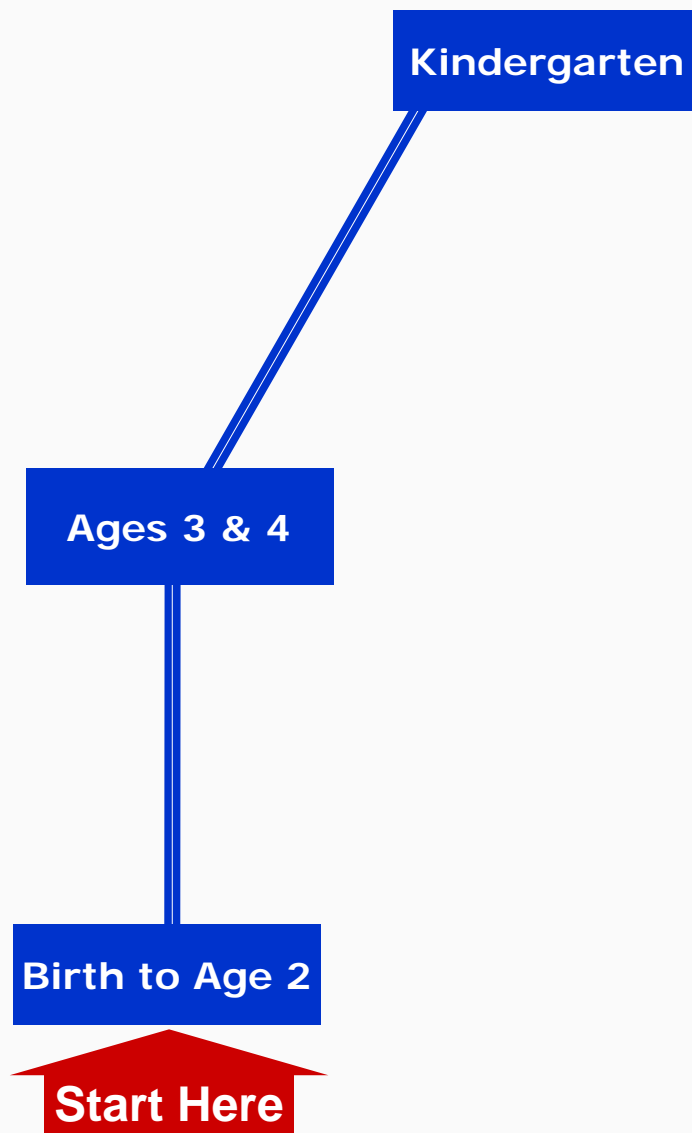




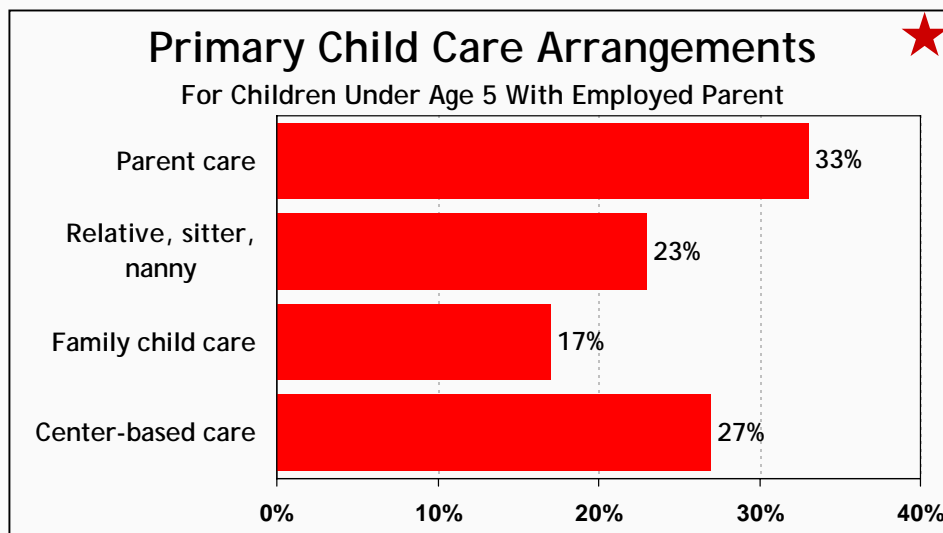
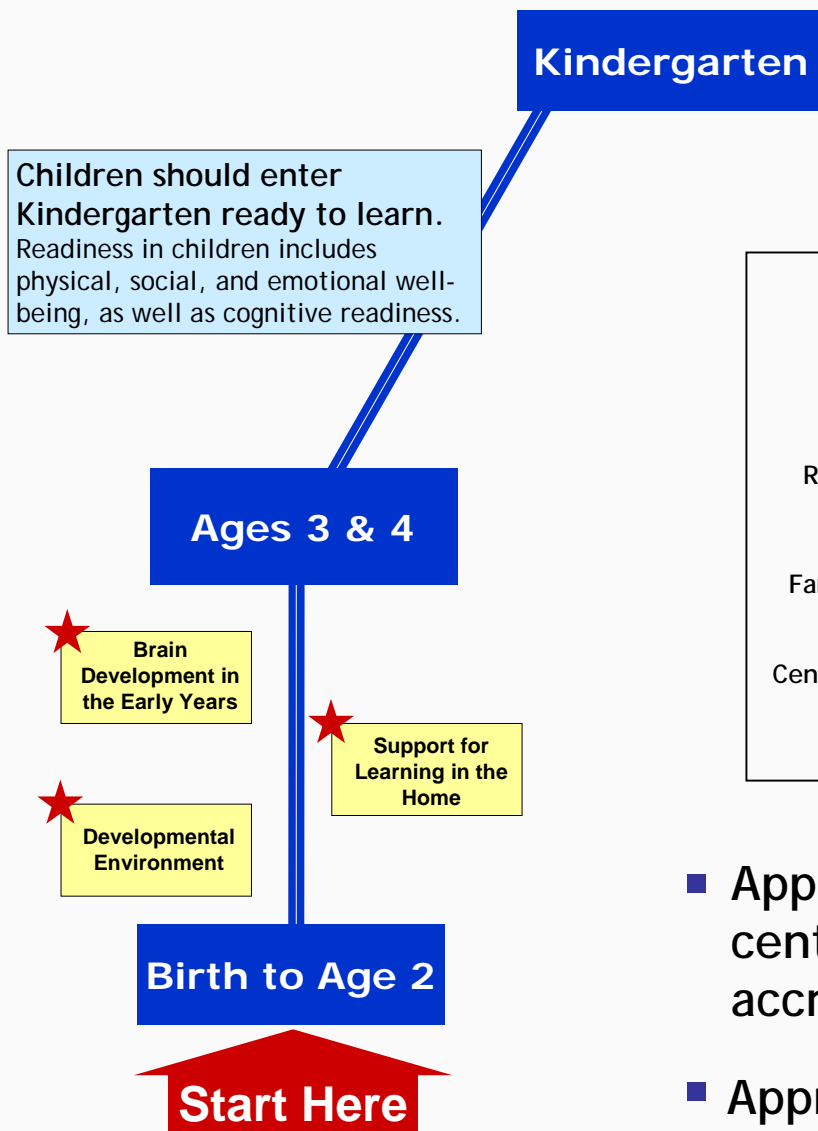








Early Learning



- Approximately 160 of the 2,000+ child care centers in Washington are nationally accredited.
- Approximately half of Washington 3- and 4-year-olds participate in preschool.

High Quality Preschool Participants

- More likely to be at grade level in achievement
- 50 percent less likely to need special education services
- 25 percent less likely to be held back by the end of 3rd grade
- Have lower rates of teen pregnancy, decreased delinquency, higher graduation rates, and higher rates of employment

For every dollar invested in high quality comprehensive preschool programs, taxpayers save up to \$7 in future costs.

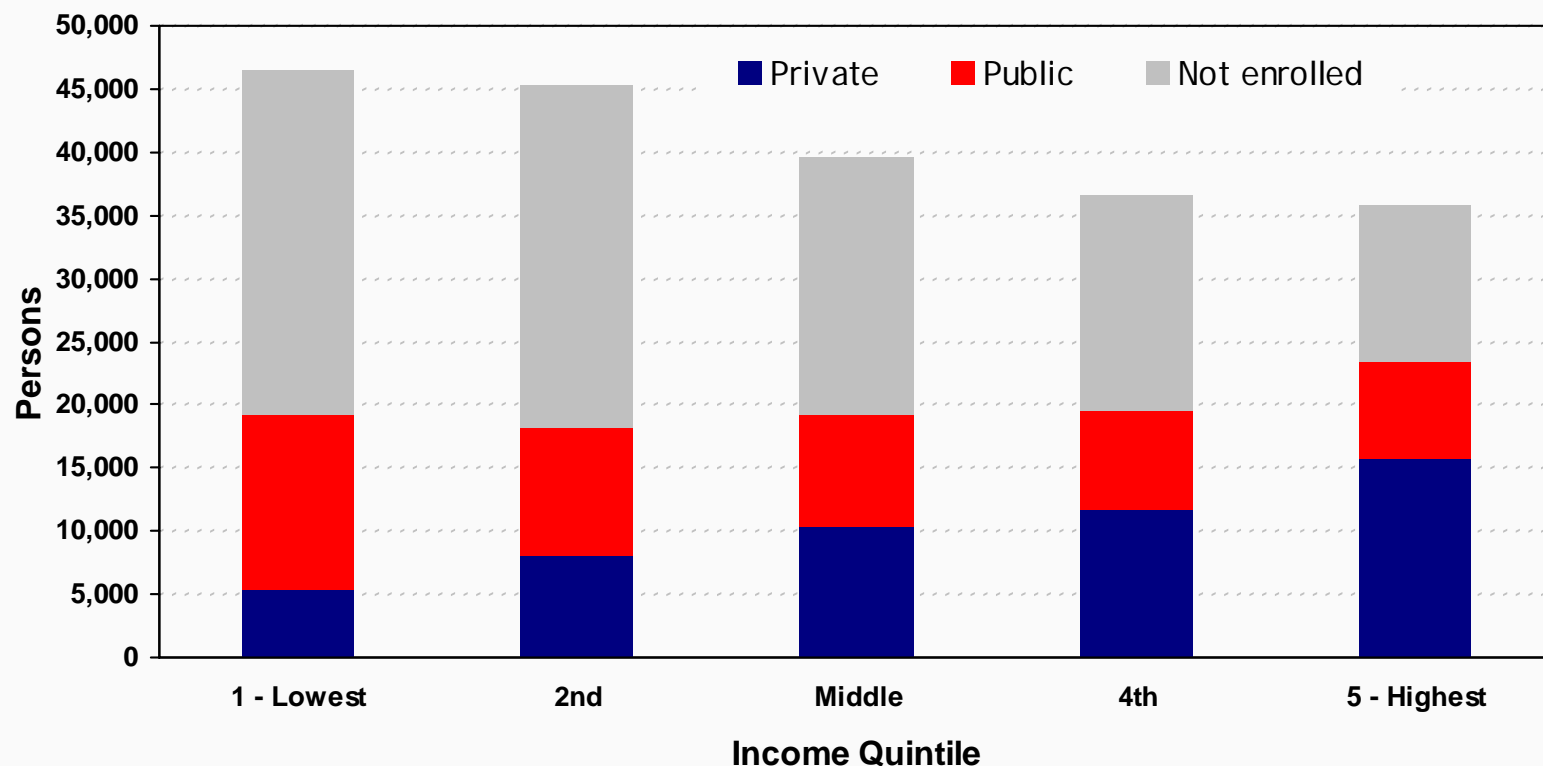
Source: ECEAP Program [www.cted.wa.gov/_CTED/documents/ID_1974_Publications.pdf]

Major Early Learning Programs

	Children Served
■ Early Childhood Education and Assistance Program (ECEAP)	6,000
■ Head Start and Early Head Start	11,056
■ Migrant and Indian Head Start	3,917
■ Infant & Toddler Early Intervention Program (ITEIP)	6,806
■ Special Ed Preschool (IDEA, Part B)	13,000
■ Working Connections Childcare	33,474

Participation in Preschool

3, 4, and 5-year-olds not enrolled in K-12 system
(by family income level)



Data Source: U.S. Census Bureau. Census 2000 5 Percent Public Use Microdata Sample (PUMS) for Washington. Analysis by OFM.

Source: U.S. Census Bureau, Census 2000 Public Use Microdata Sample (PUMS), 5 Percent Sample for Washington State

Kindergarten

Grades 1,2,3

Grades 4,5,6

Early Grades

Kindergarten

Grades 1,2,3

Grades 4,5,6

All students should read at or above grade level by the end of first grade.

Students who are not reading on grade level by the end of first grade are unlikely to be reading on grade level by the end of third grade.

All students should read at or above grade level by the end of third grade.

For third grade students who are not reading at grade level, the chances of graduating from high school are slim.

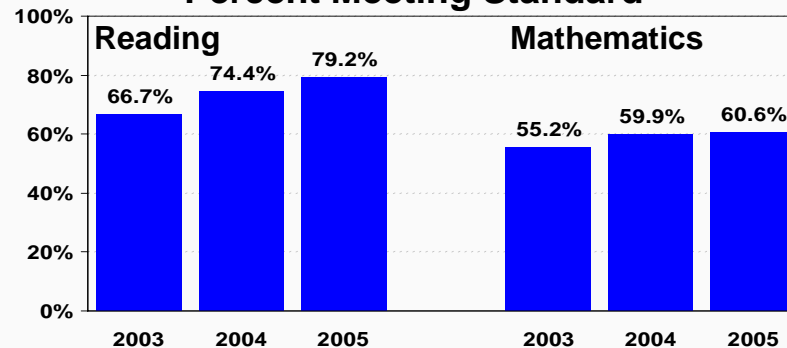
Reference

Public, Private,
and Home-Based
Enrollments

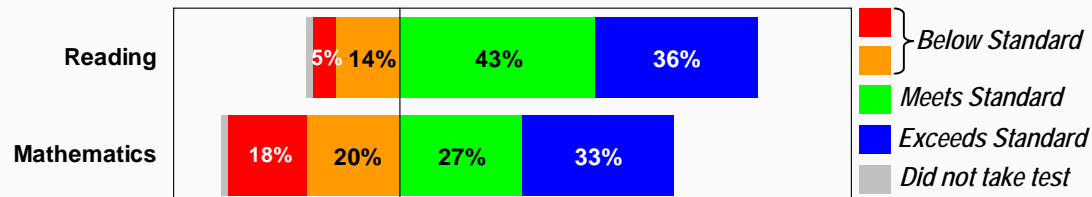
Private, and
Home-Based
Enrollments as
share of total

4th Grade WASL Results

Percent Meeting Standard

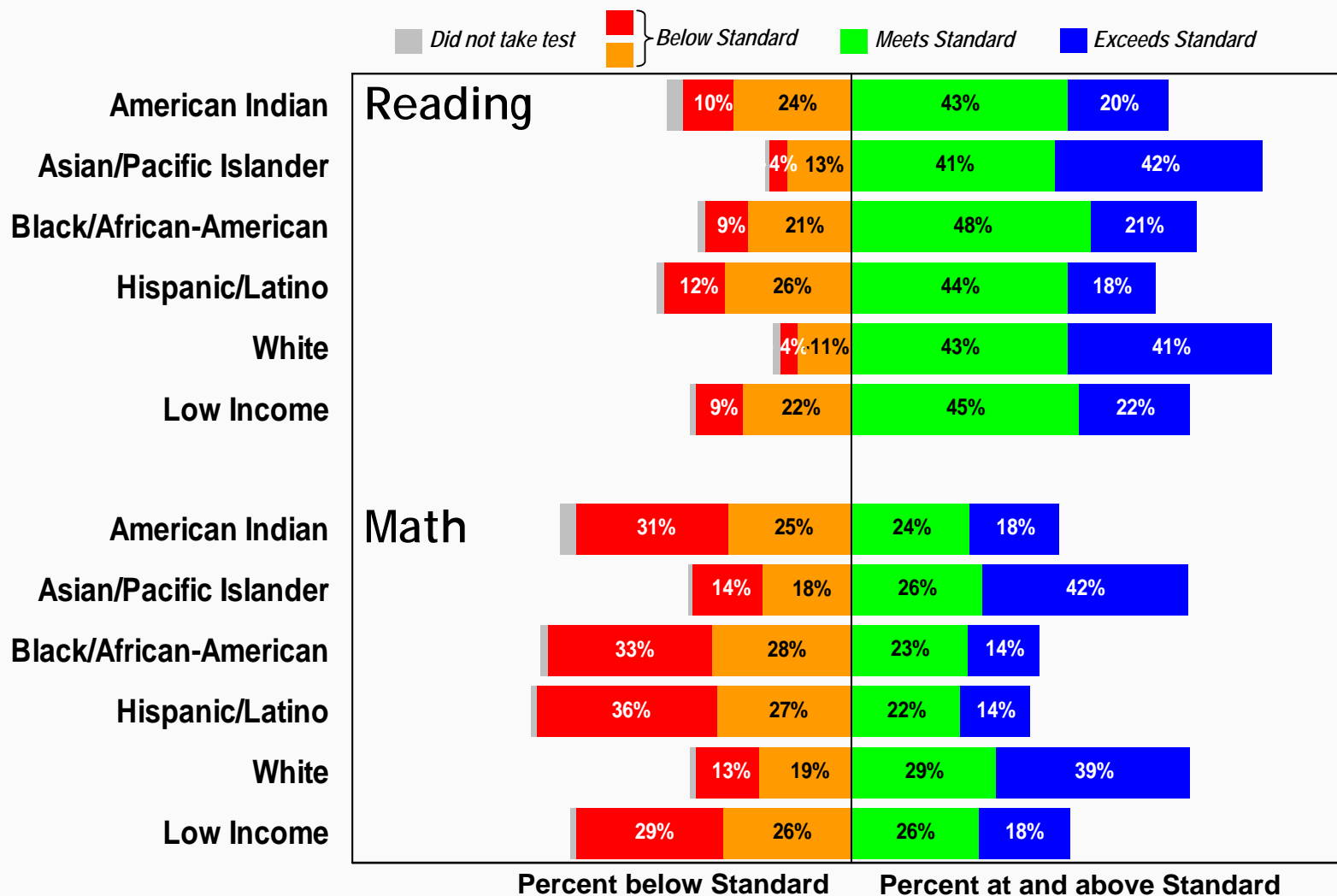


2005 Results



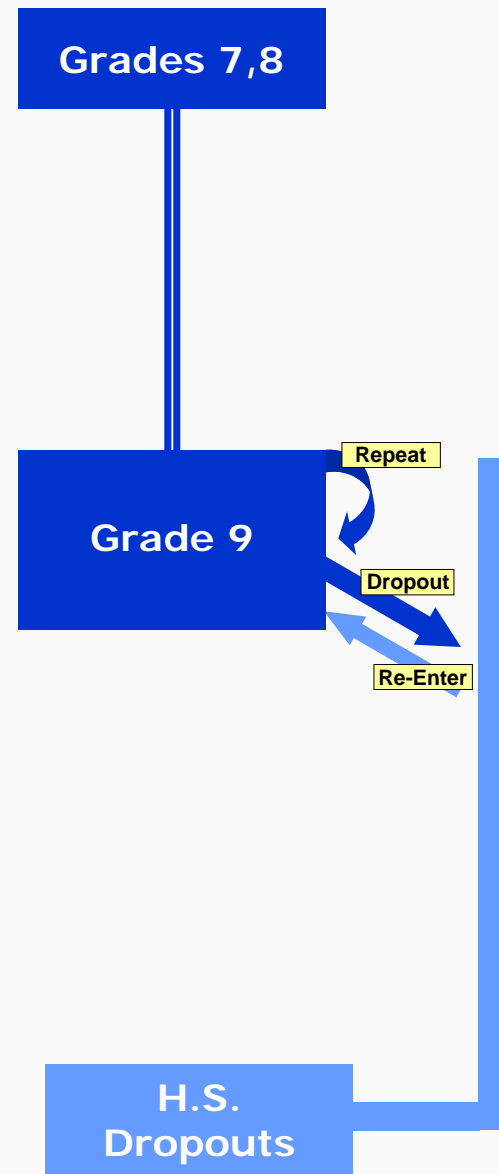
Percentage below Standard Percentage at and above Standard

4th Grade WASL Results



Source: OSPI [reportcard.ospi.k12.wa.us/]

Middle Grades



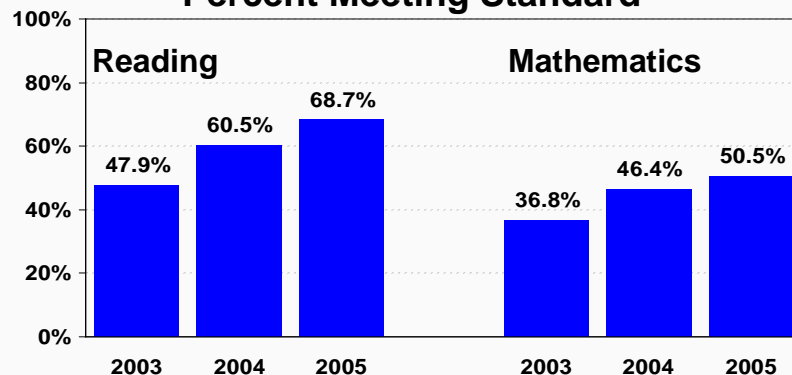
All students should have taken Algebra I by the end of eighth grade. Math achievement in the eighth grade clears the way for students to take advanced classes in high school.

Grades 7,8

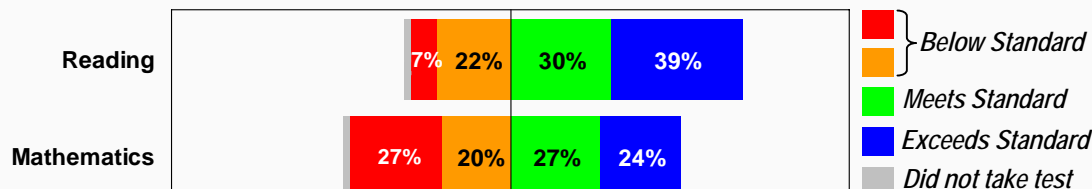
“...the transition to high school has never been more treacherous nor the consequences more personally disastrous for so many.”

7th Grade WASL Results

Percent Meeting Standard



2005 Results



Percentage below Standard Percentage at and above Standard

Grade 9

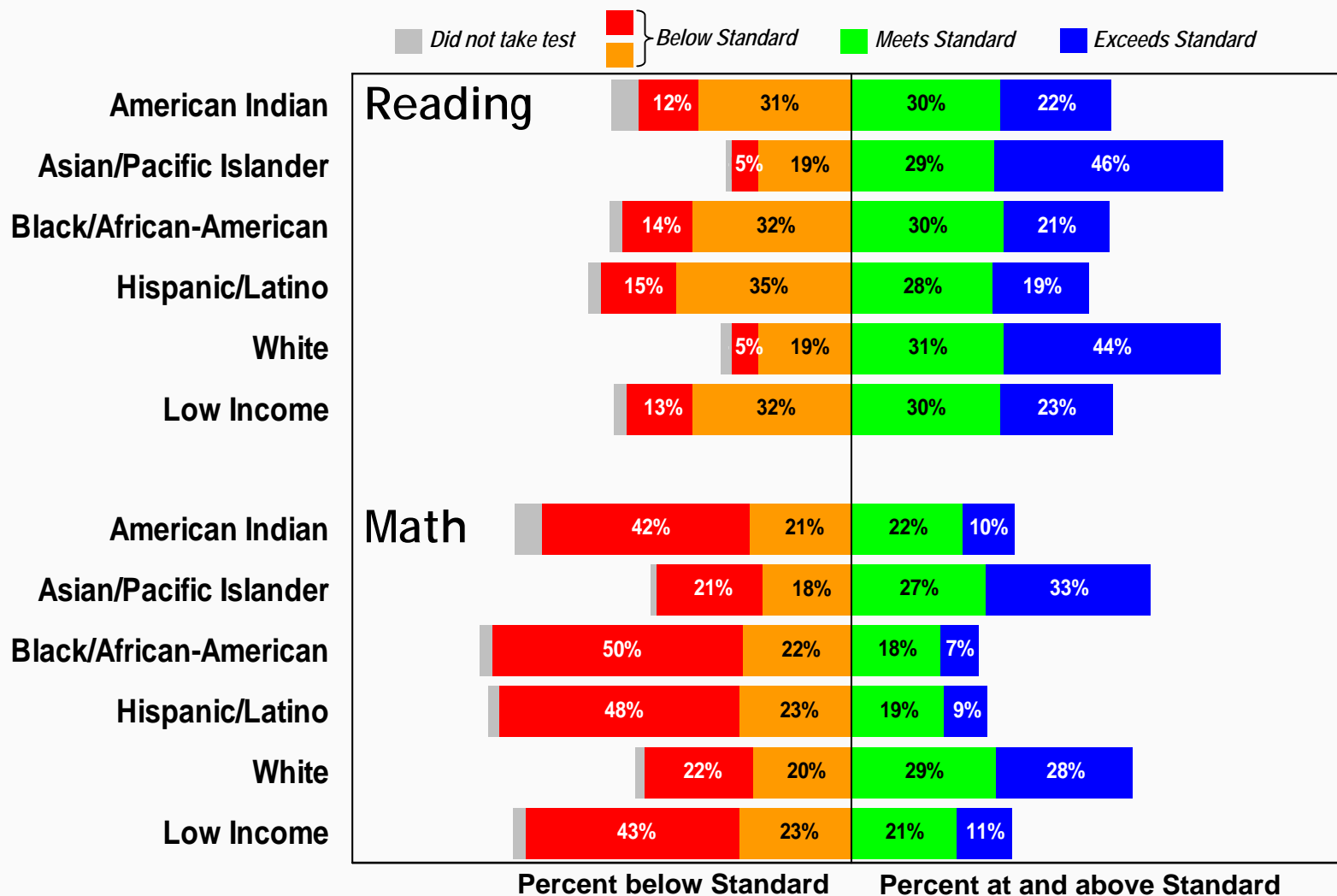
Repeat

Dropout

Re-Enter

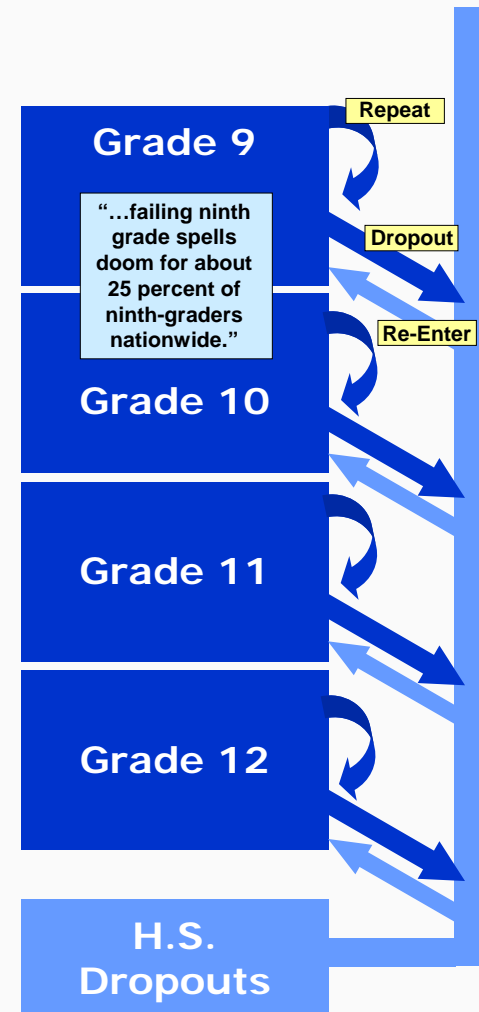
**H.S.
Dropouts**

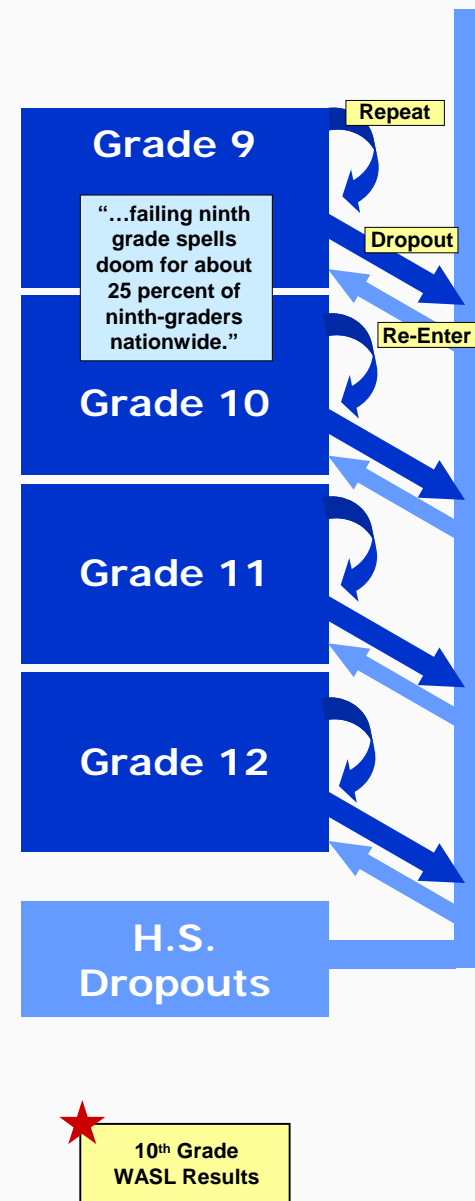
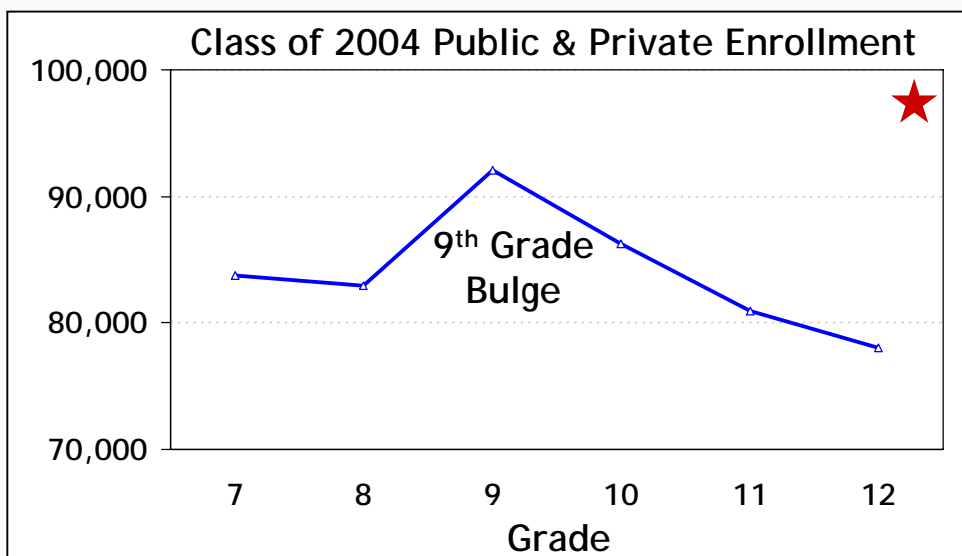
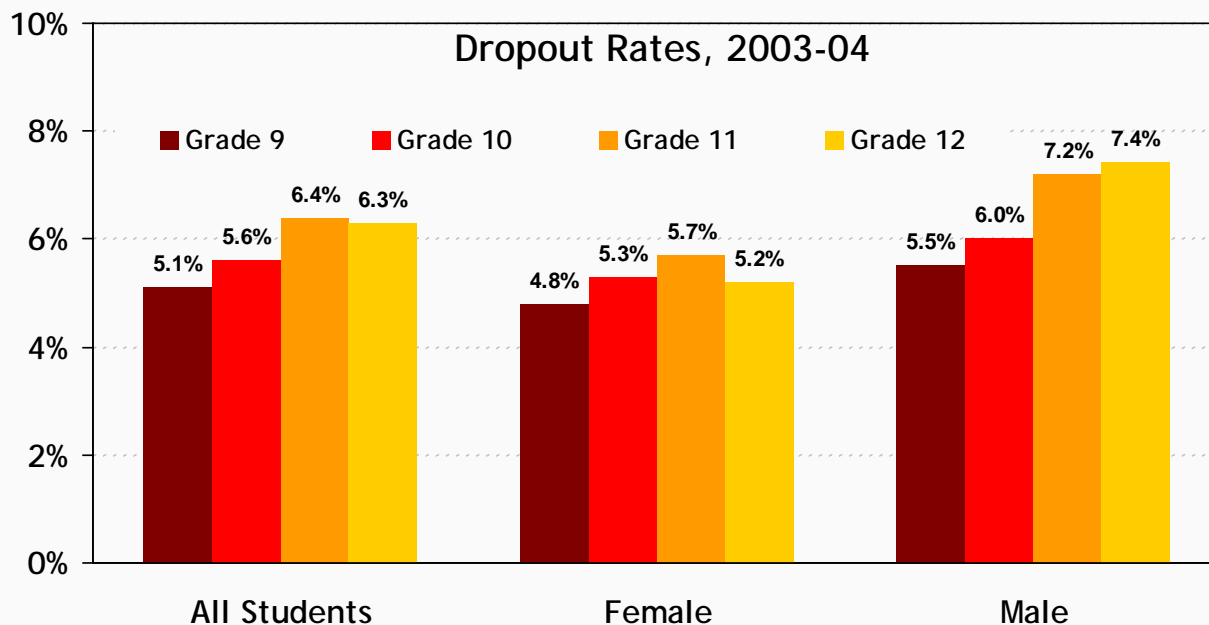
7th Grade WASL Results



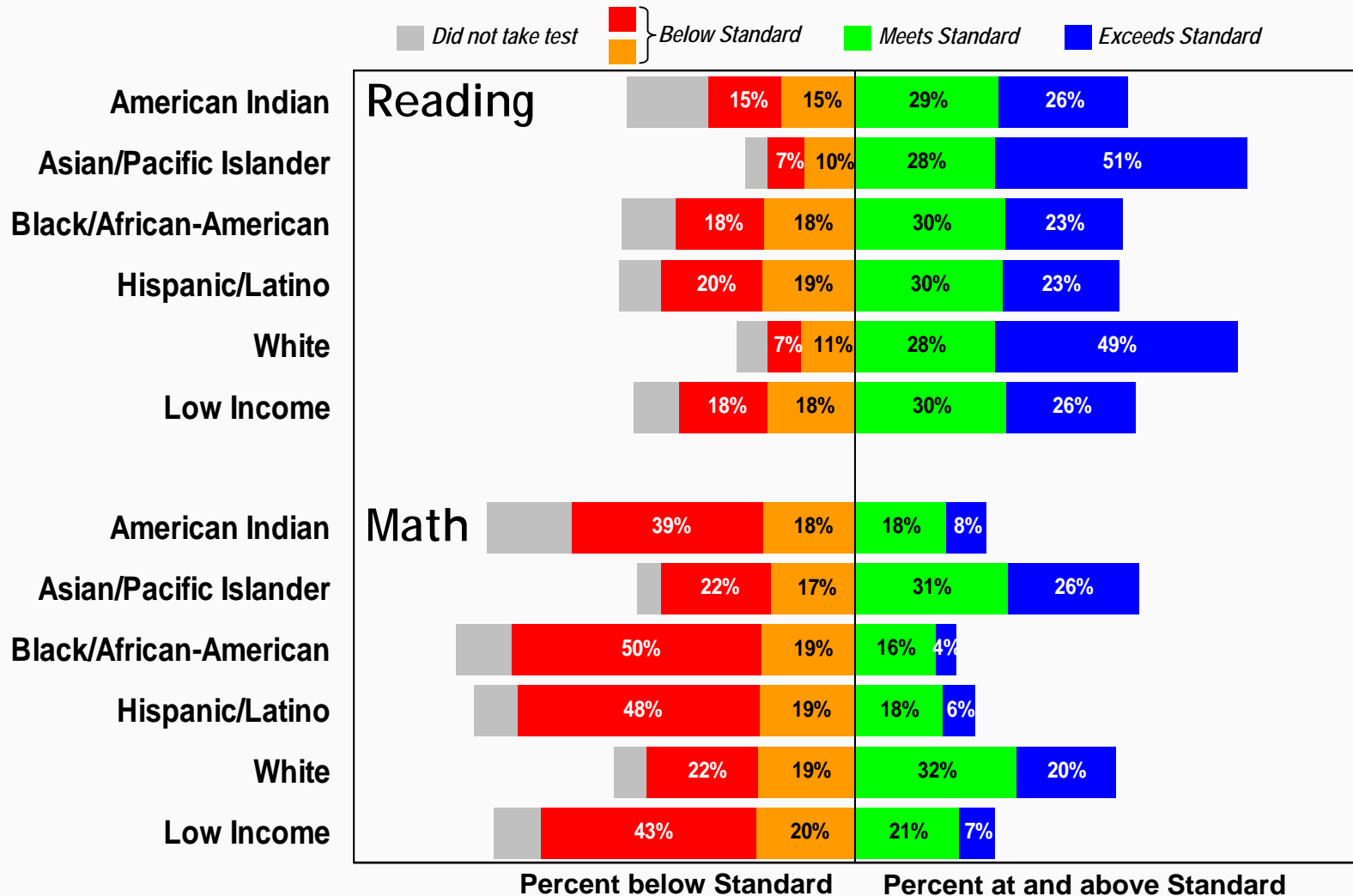
Source: OSPI [reportcard.ospi.k12.wa.us/]

High School





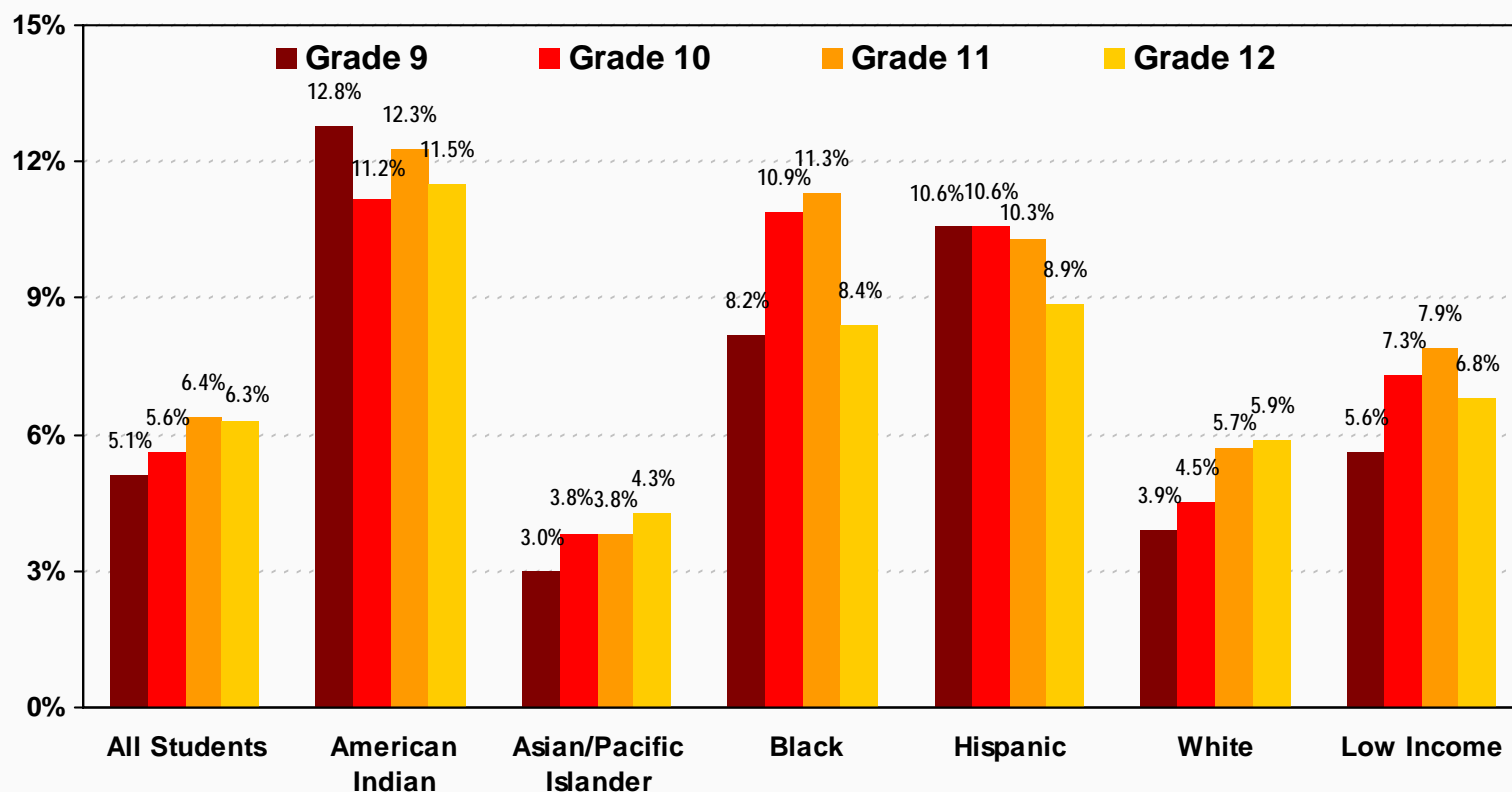
10th Grade WASL Results



Source: OSPI [reportcard.ospi.k12.wa.us/]

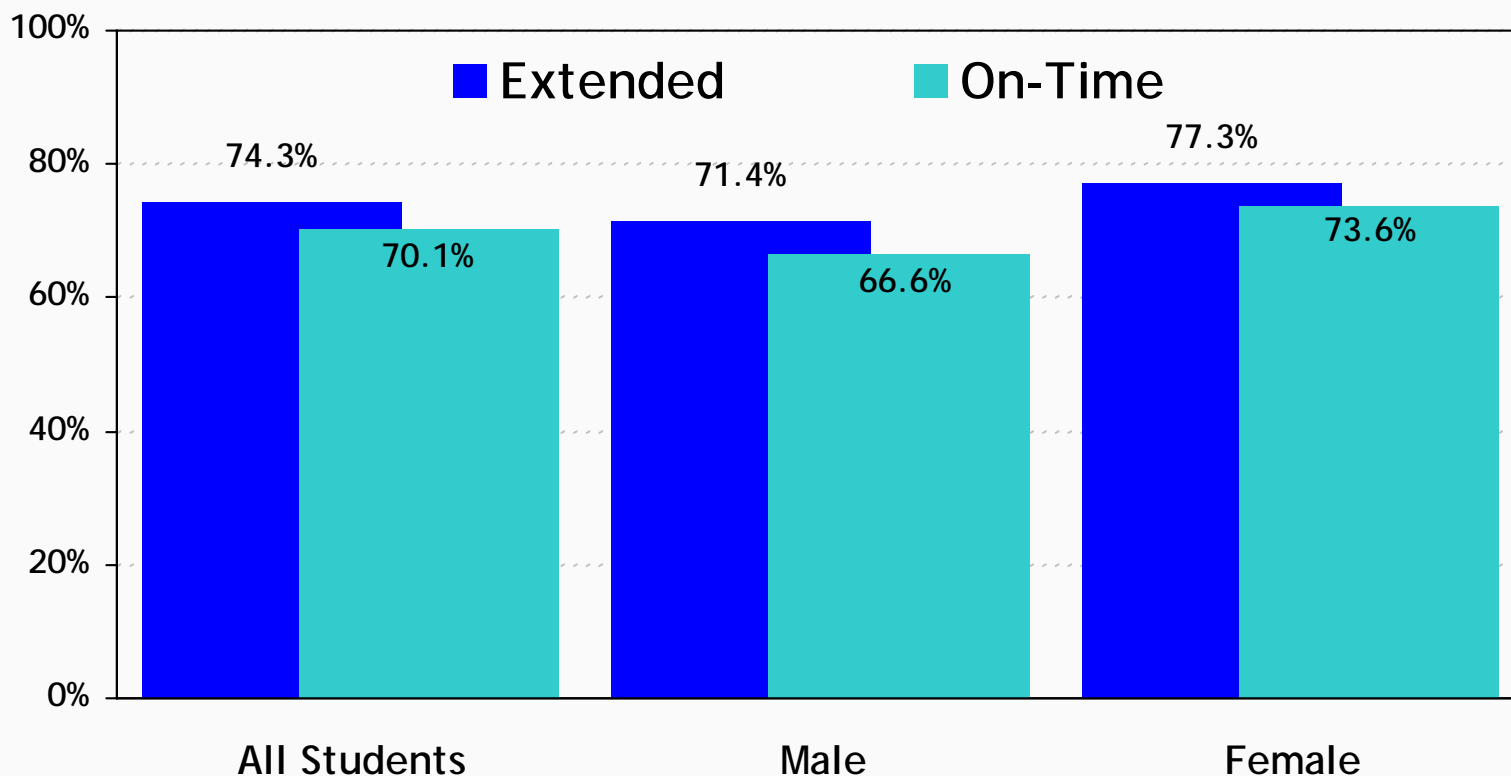
High School Dropout Rates

By Grade, 2003-04



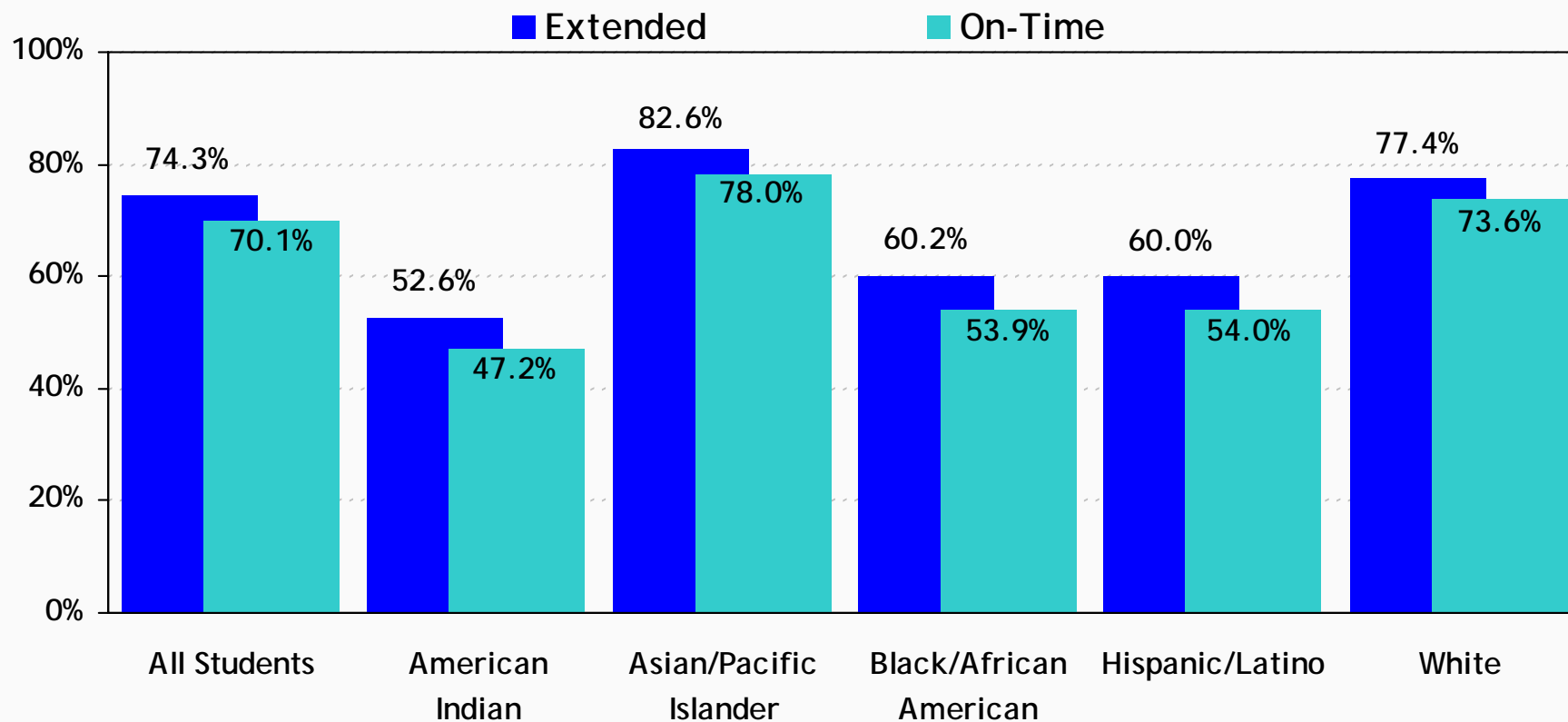
Source: OSPI, *Graduation and Dropout Statistics for Washington's Counties, Districts, and Schools, School Year 2003-04*.
 September 2005. Available at www.k12.wa.us/DataAdmin/.

High School Graduation Rates



Source: OSPI, *Graduation and Dropout Statistics for Washington's Counties, Districts, and Schools, School Year 2003-04*. September 2005. Available at www.k12.wa.us/DataAdmin/.

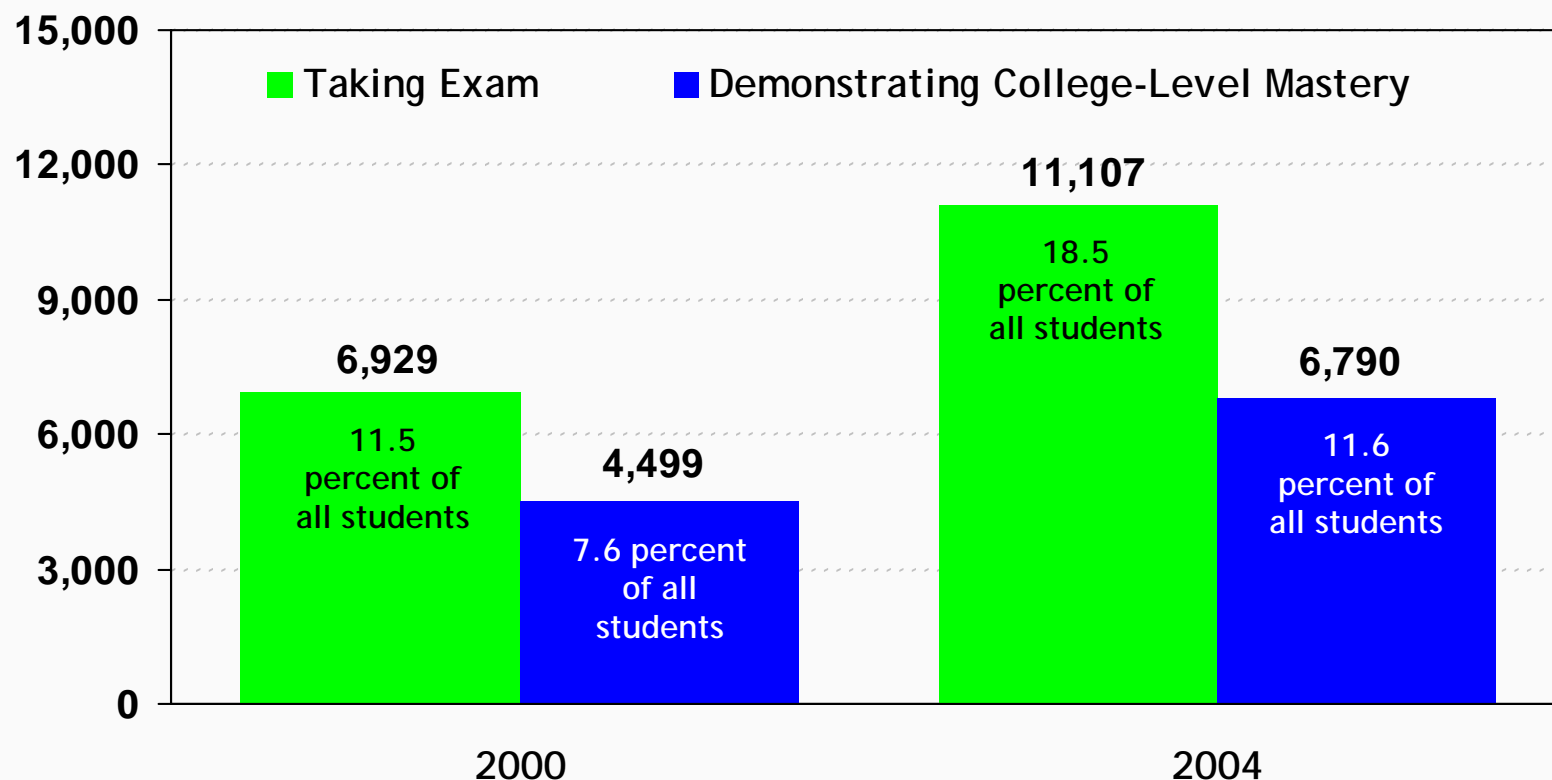
High School Graduation Rates



Source: OSPI, *Graduation and Dropout Statistics for Washington's Counties, Districts, and Schools, School Year 2003-04*.
September 2005. Available at www.k12.wa.us/DataAdmin/.

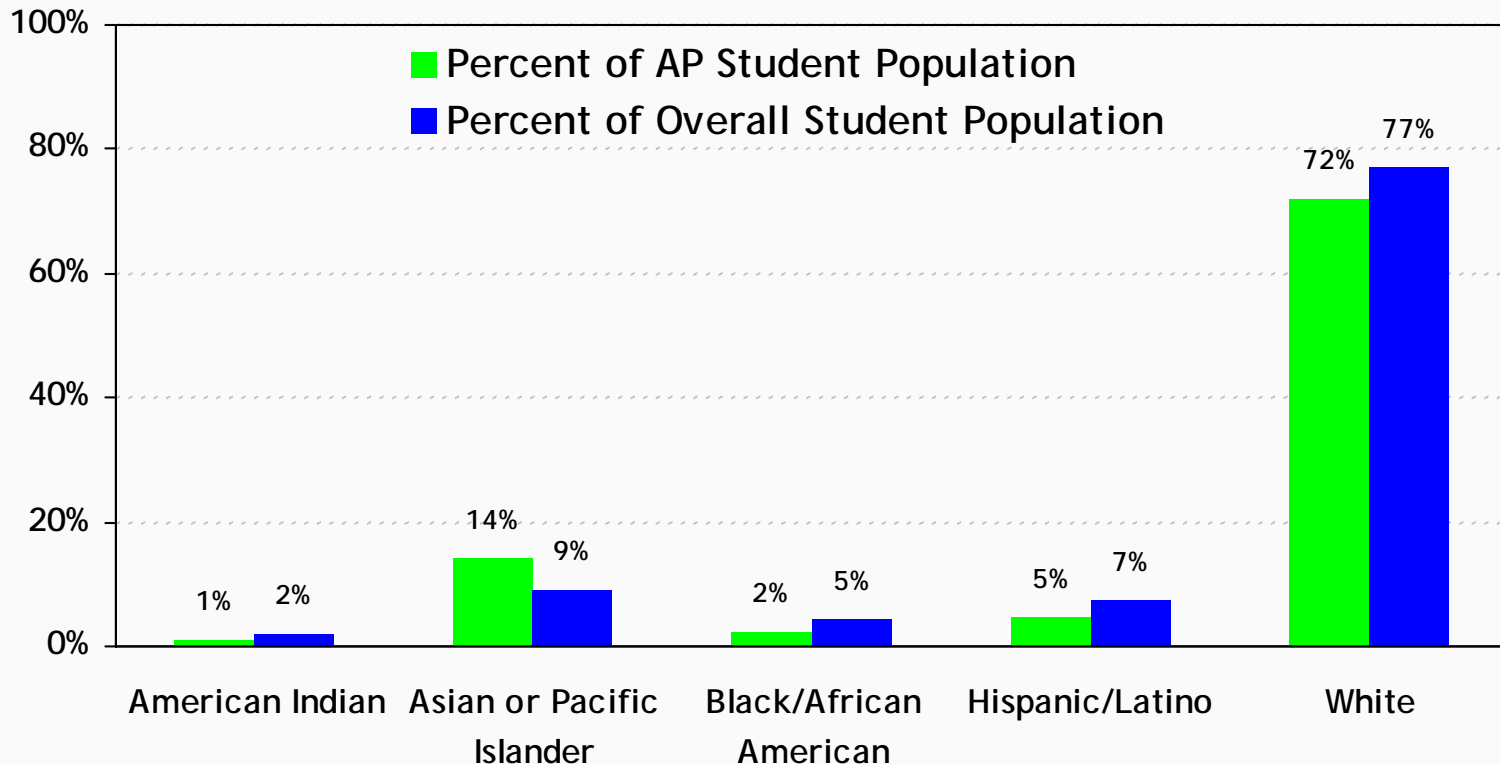
Advanced Placement Participation

A 1999 U.S. Department of Education study found that a rigorous high school curriculum is the most powerful predictor of bachelor's degree completion, much more accurate than GPA or test scores.



Source: College Board: Advanced Placement Report to the Nation. Data for Washington.
[\[www.collegeboard.com/prod_downloads/about/news_info/ap/2005/ap-report-nation.pdf\]](http://www.collegeboard.com/prod_downloads/about/news_info/ap/2005/ap-report-nation.pdf)

AP Student Demographics vs. Overall Student Demographics, 2004



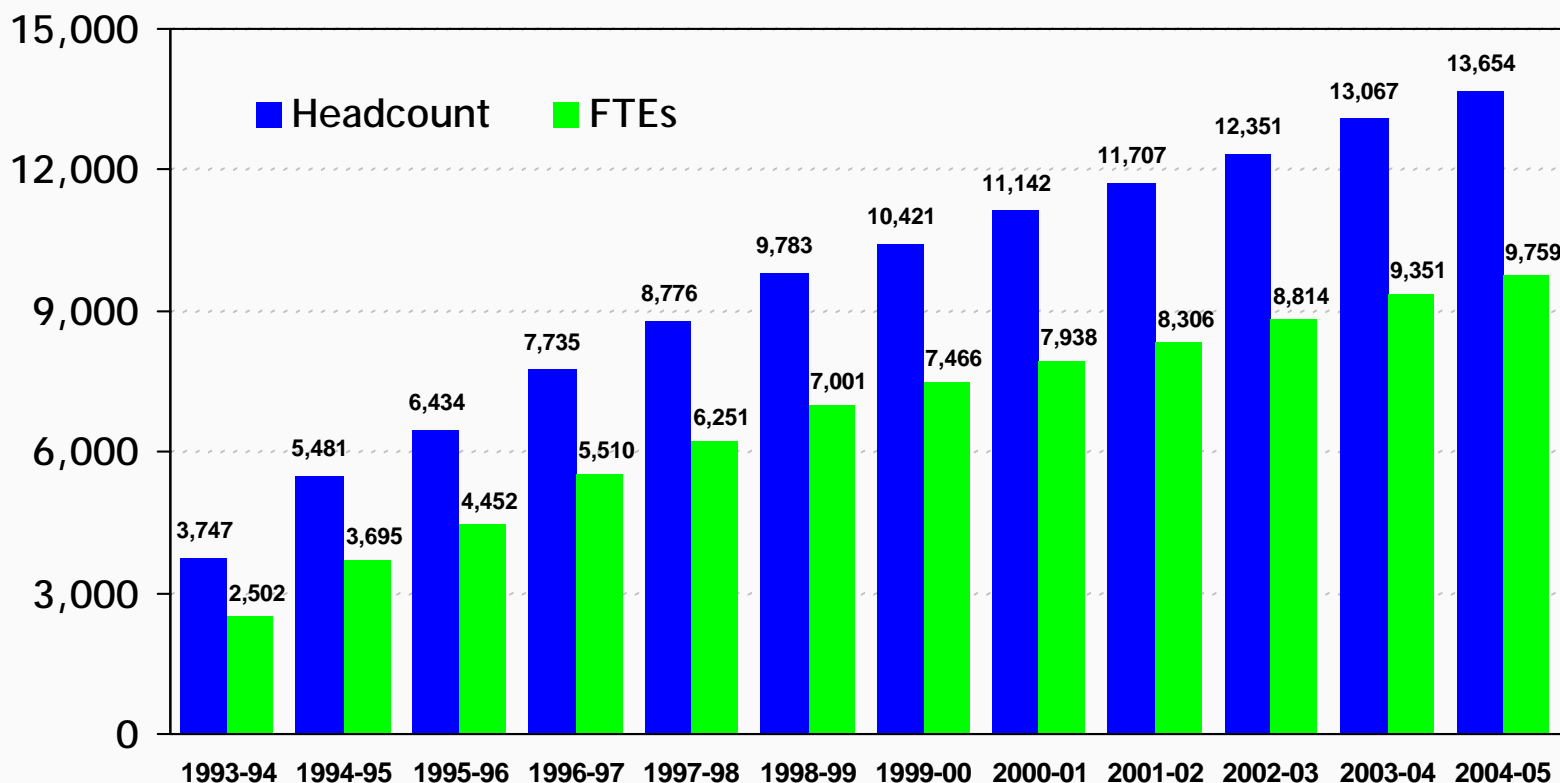
Source: College Board: AP Report to the Nation 2005. Data for Washington.

[http://www.collegeboard.com/prod_downloads/about/news_info/ap/2005/wa_2005.pdf]

Running Start Enrollment

1993-94 to 2004-05 growth in public K-12 headcount enrollment (grades 11-12) : 25.5%

1993-94 to 2004-05 growth in Running Start headcount enrollment: 264.4%



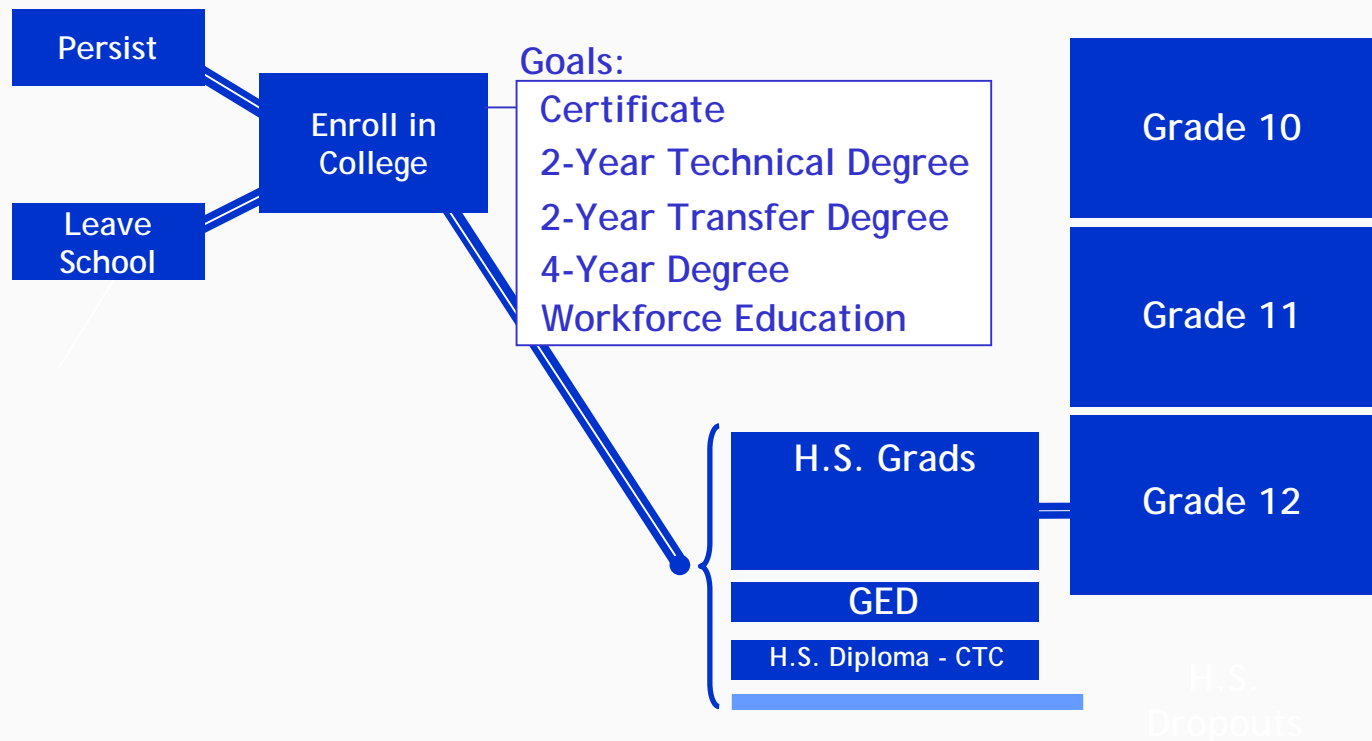
Source: Caseload Forecast Council (Running Start enrollments), OSPI (enrollment in grades 11 and 12)

Alternative High School Credentials

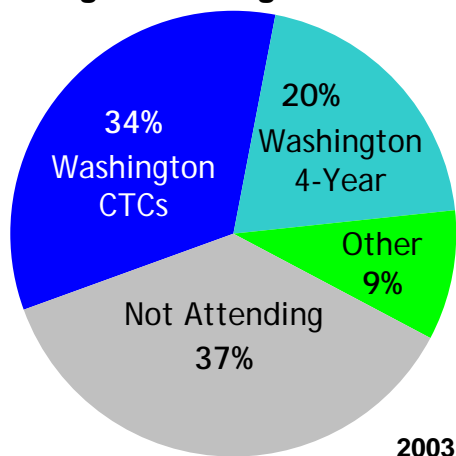
- In 2003, 14,498 General Education Development (GED) certificates were awarded; 4,163 went to persons ages 16 to 18.
- In 2003-04, 1,311 High School Diplomas were awarded by CTCs

Source: State Board for Community and Technical Colleges.

High School to College



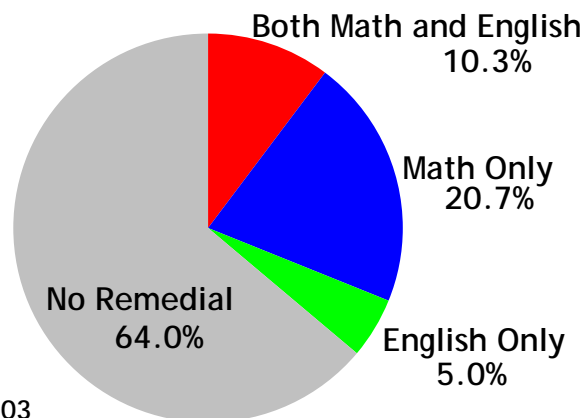
College-Attending Rates



2003

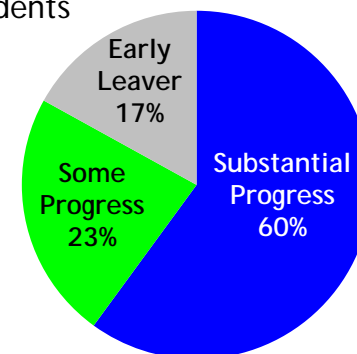
All students should enter postsecondary education prepared for college-level work, not needing to take remedial coursework.

Remedial Course-Taking



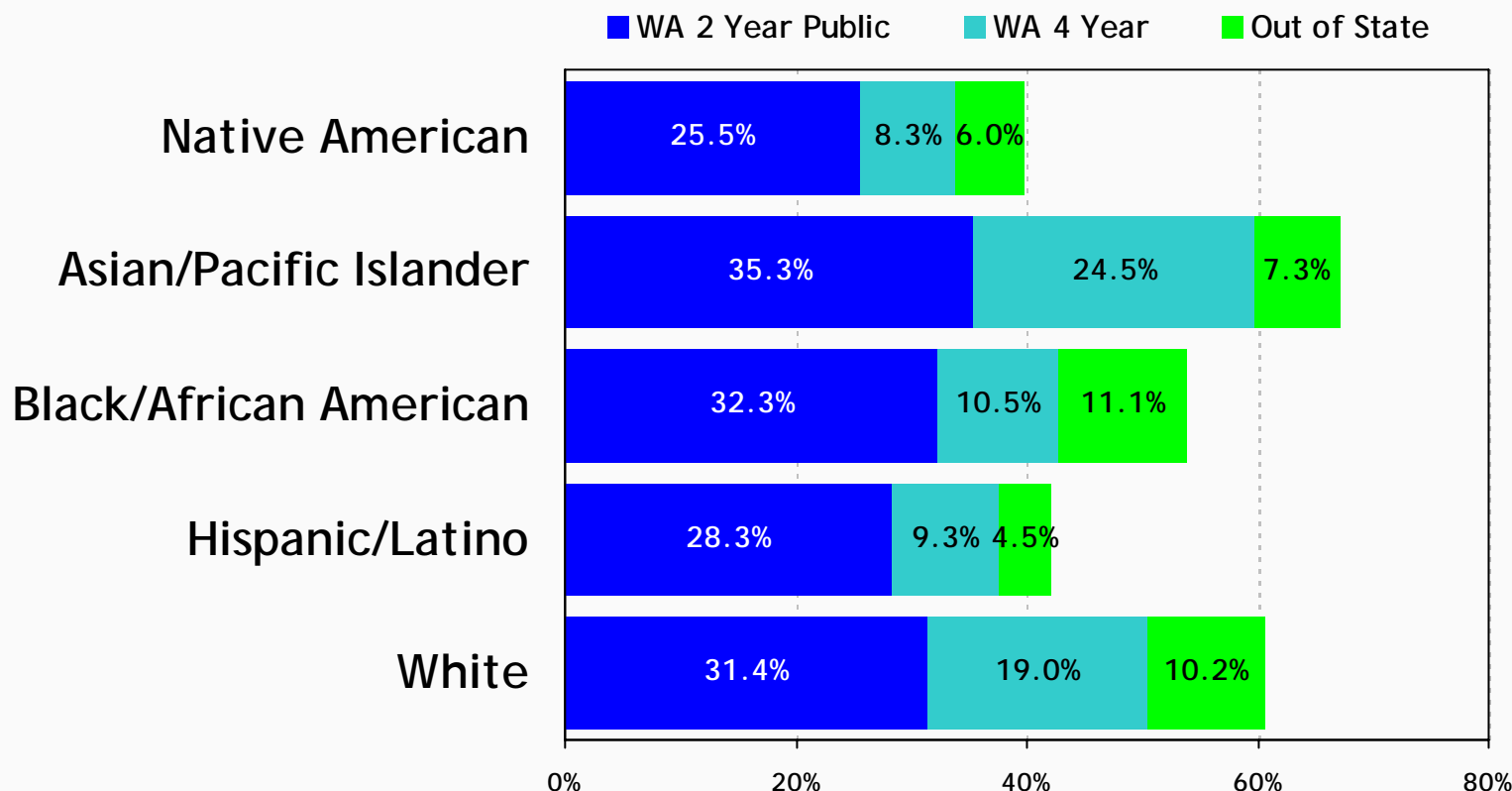
Class of 2003

Progress of Degree-Seeking CTC Students



83 percent of freshmen entering a public 4-year institution from high school in fall 1998 returned to a public 4-year institution in the subsequent fall.

College-Attending Rates by Race and Ethnicity

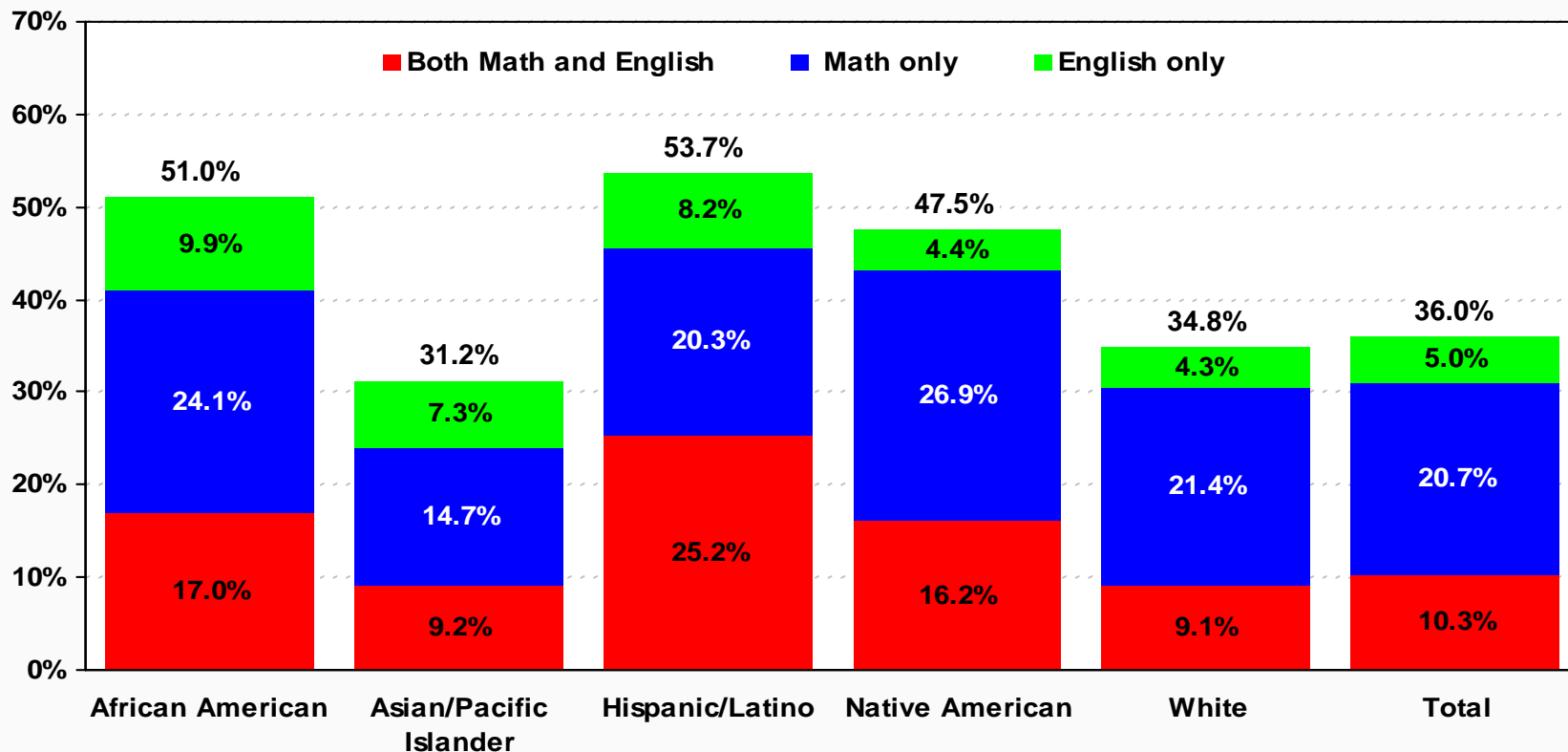


*Completers include on-time and delayed recipients of regular high school diplomas as well as IEP graduates, Adult Diploma recipients and GED recipients

Source: OSPI/WSU Social and Economic Sciences Research Center. *Washington State College Enrollment Study, Class of 2003: College Enrollment in the First Year after Graduation.* www.sesrc.wsu.edu/nsc/

Remedial Coursework

2003 H.S. Completers* Entering College



*Completers include on-time and delayed recipients of regular high school diplomas as well as IEP graduates, Adult Diploma recipients and GED recipients

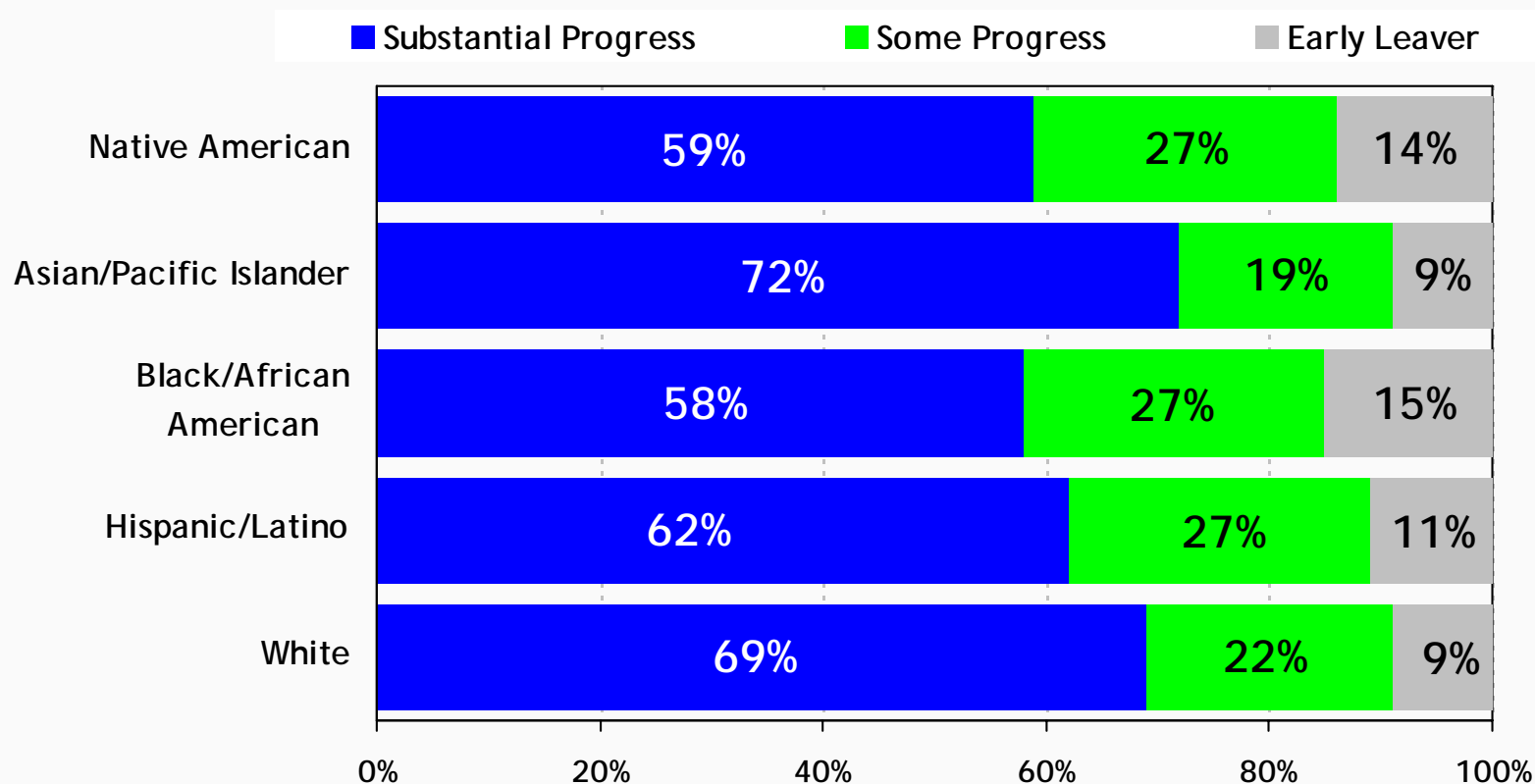
Source: Social and Economic Sciences Research Center. *Washington State Graduate Follow-up Study: Class of 2003 All Graduates*. Olympia, WA: Office of the Superintendent of Public Instruction [survey.sesrc.wsu.edu/gfs/pdfpapers/Class2003Y1AllGrads.pdf]

Progress of Degree-Seeking Students Community and Technical Colleges

Substantial Progress = Students graduating or attending four or more quarters over the two-year period.

Some Progress = Students attending two or three quarters over the two-year period.

Early Leavers = Students attending only one quarter and not returning within two years' time.

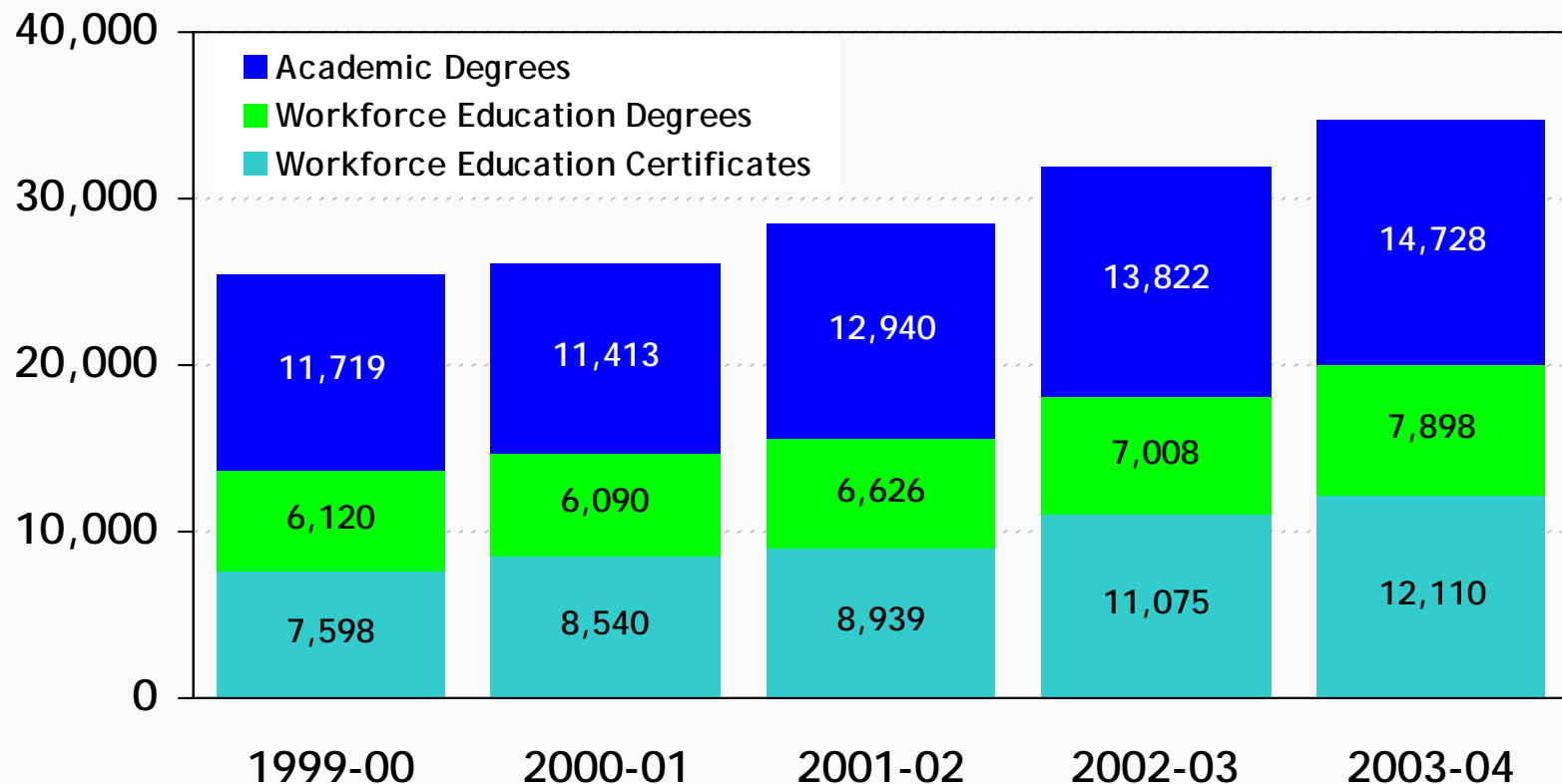


Source: State Board for Community and Technical Colleges, *Academic Year Report, 2003-04*. December 2004. Starting cohort: 2002.
[\[www.sbctc.ctc.edu/data/AcadRpts/ayr0304/2003-04_Acad_Yr_Rep.pdf\]](http://www.sbctc.ctc.edu/data/AcadRpts/ayr0304/2003-04_Acad_Yr_Rep.pdf)

More than one-third of all new students (48 percent of full-time and 24 percent of part-time) enroll with the intent of completing an associate degree (job preparatory or transfer degree) at their college.

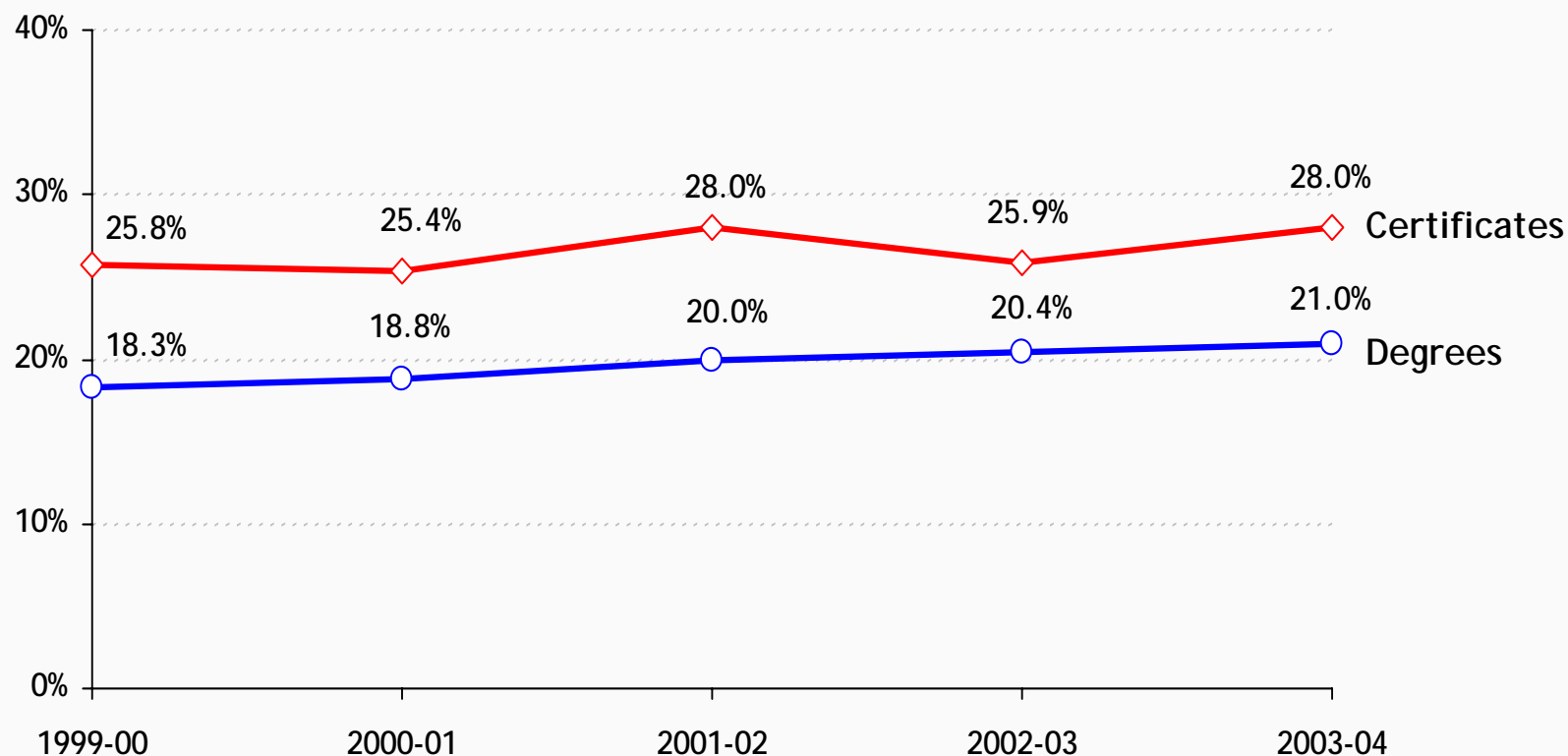
College Completion

Diplomas, Degrees, Certificates Awarded Community and Technical College System



Source: State Board for Community and Technical Colleges, 2003-04 Academic Year Report
[\[www.sbctc.ctc.edu/data/AcadRpts/ayr0304/2003-04_Acad_Yr_Rep.pdf\]](http://www.sbctc.ctc.edu/data/AcadRpts/ayr0304/2003-04_Acad_Yr_Rep.pdf)

Community and Technical Colleges Share of Degrees and Certificates Awarded To Students of Color

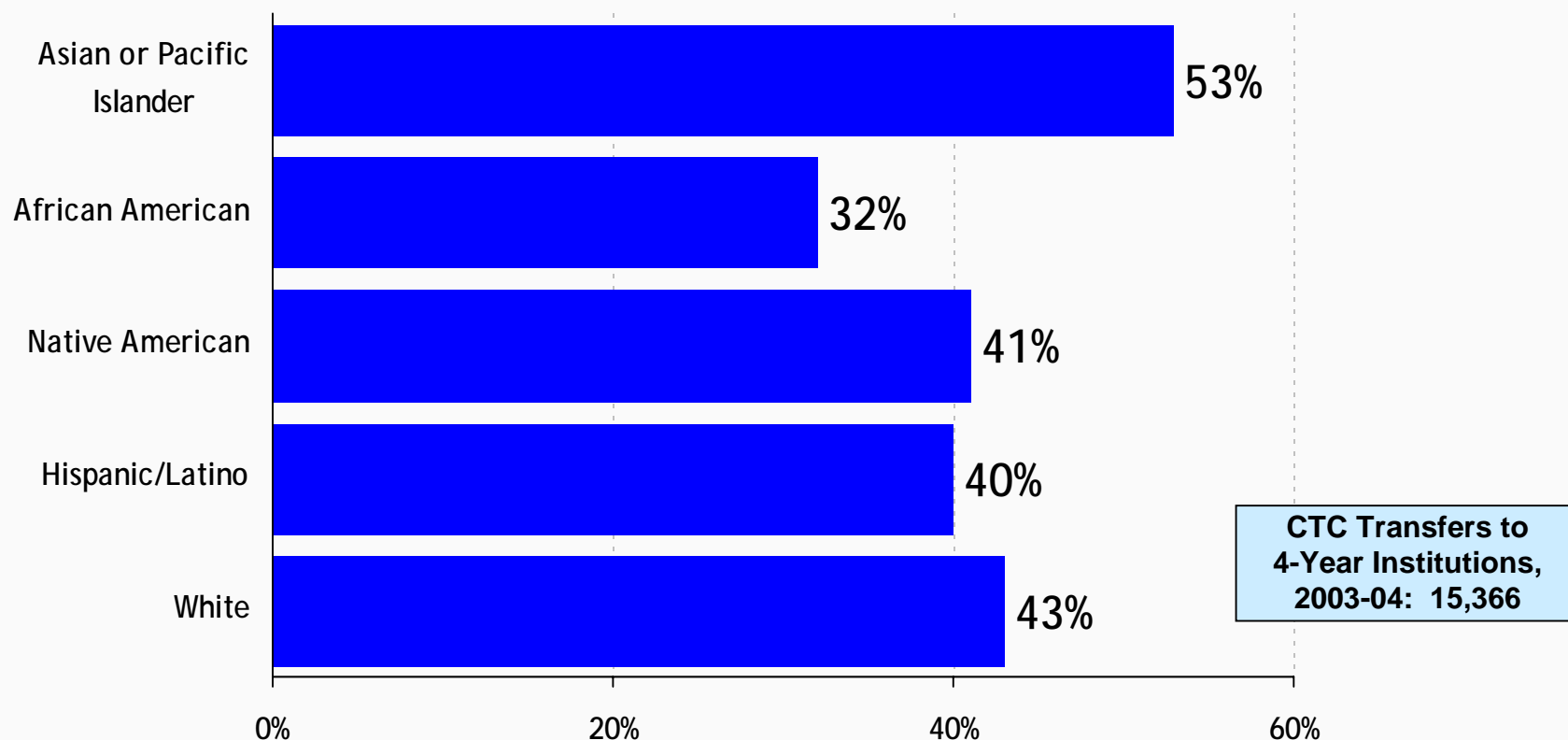


Source: State Board for Community and Technical Colleges, 2003-04 Academic Year Report
[www.sbctc.ctc.edu/data/AcadRpts/ayr0304/2003-04_Acad_Yr_Rep.pdf]

Community and Technical Colleges

Transfer Rate for Students Prepared to Transfer

1998 Leaving Cohort

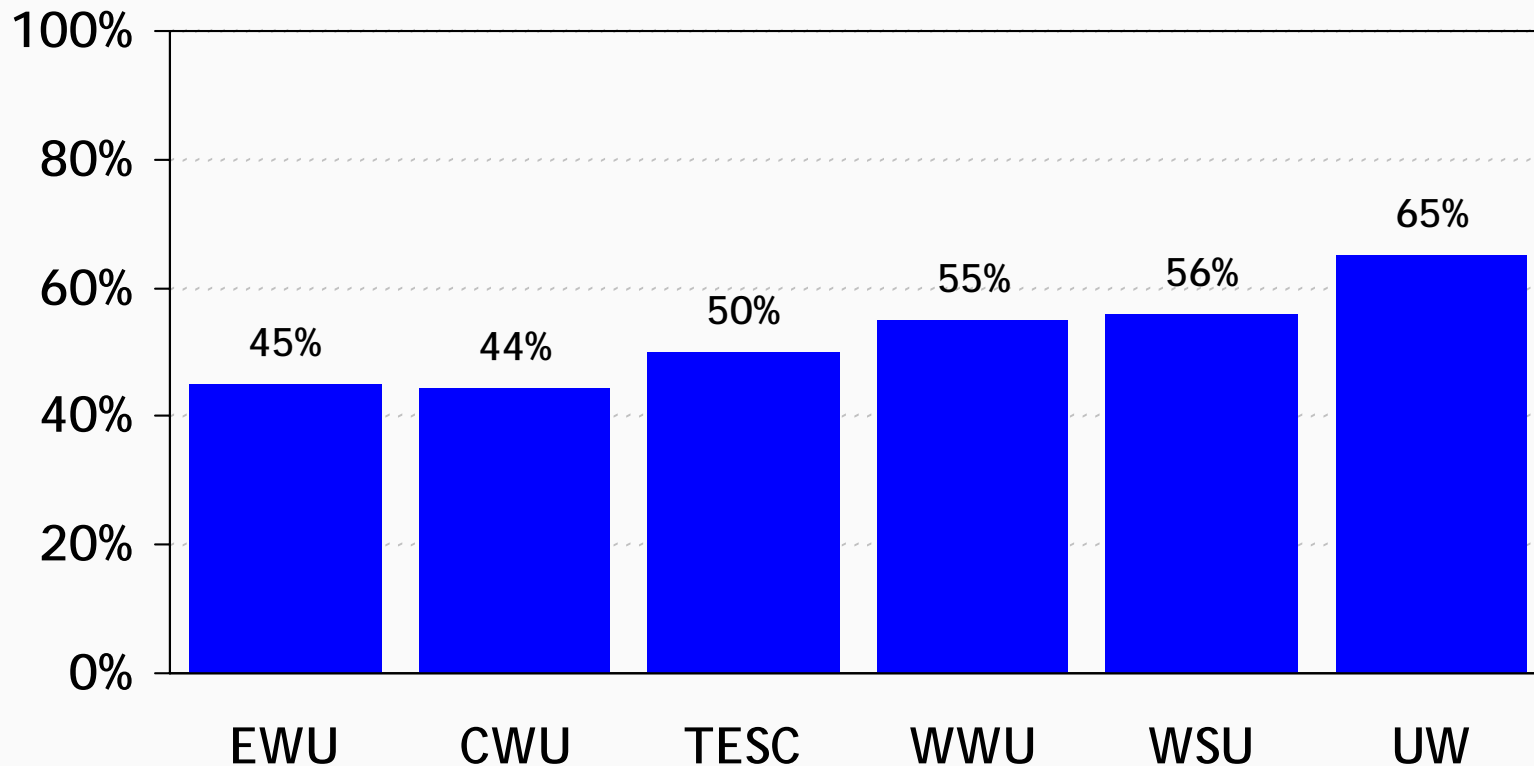


Source: State Board for Community and Technical Colleges, Access and Success for System Goals for People of Color in Washington Community and Technical Colleges: Eighth Progress Report, Research Report No. 02-3, June 2002.

www.sbctc.ctc.edu/data/rschrpts/Resh02-3.pdf

Students prepared to transfer have earned 45 or more college-level credits with a GPA of 2.0 or higher and were coded as a transfer student in their last quarter.

Five-Year Graduation Rates Four-Year Public Institutions, 2003-04

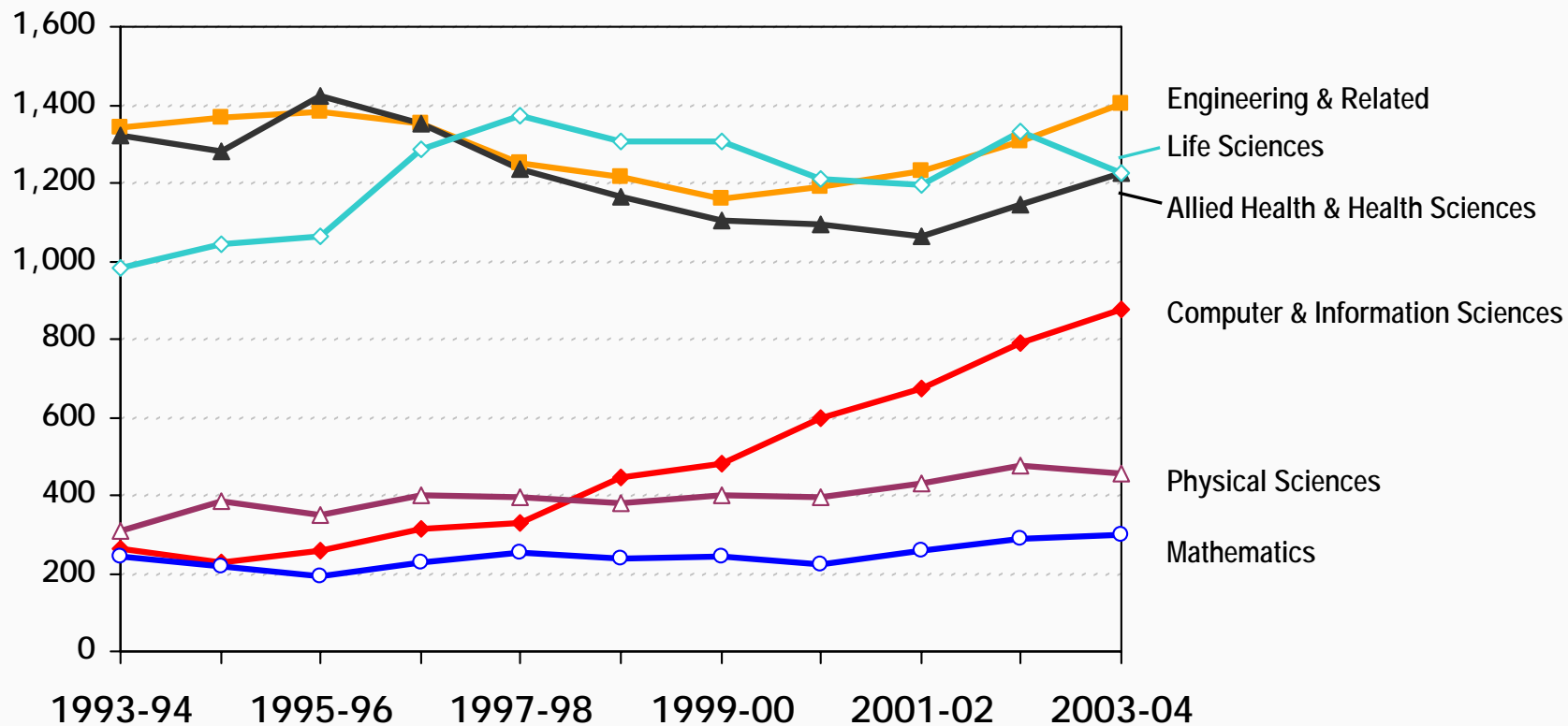


Source: Higher Education Coordinating Board, 2003-04 Accountability Report.

[\[www.hecb.wa.gov/news/newsreports/documents/2003-04AccountabilityReportJanuary2005.pdf\]](http://www.hecb.wa.gov/news/newsreports/documents/2003-04AccountabilityReportJanuary2005.pdf)

Note: Table shows the percentage of students who entered public baccalaureate institutions as freshmen in 1999 and graduated by 2003.

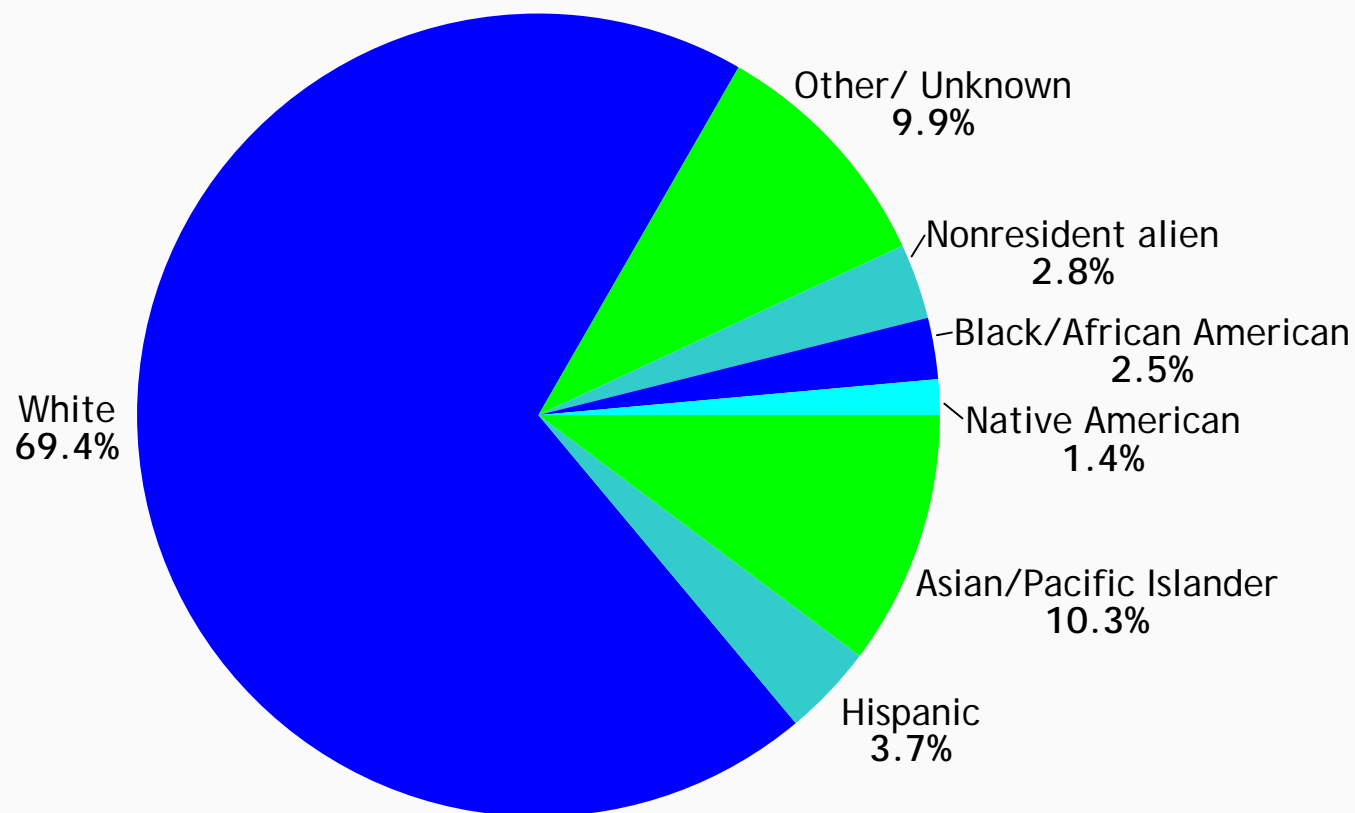
Baccalaureate Degrees Granted in Math, Science, & Engineering by Washington Public and Independent Institutions



Source: National Center for Education Statistics (NCES): Integrated Postsecondary Education Data System (IPEDS)

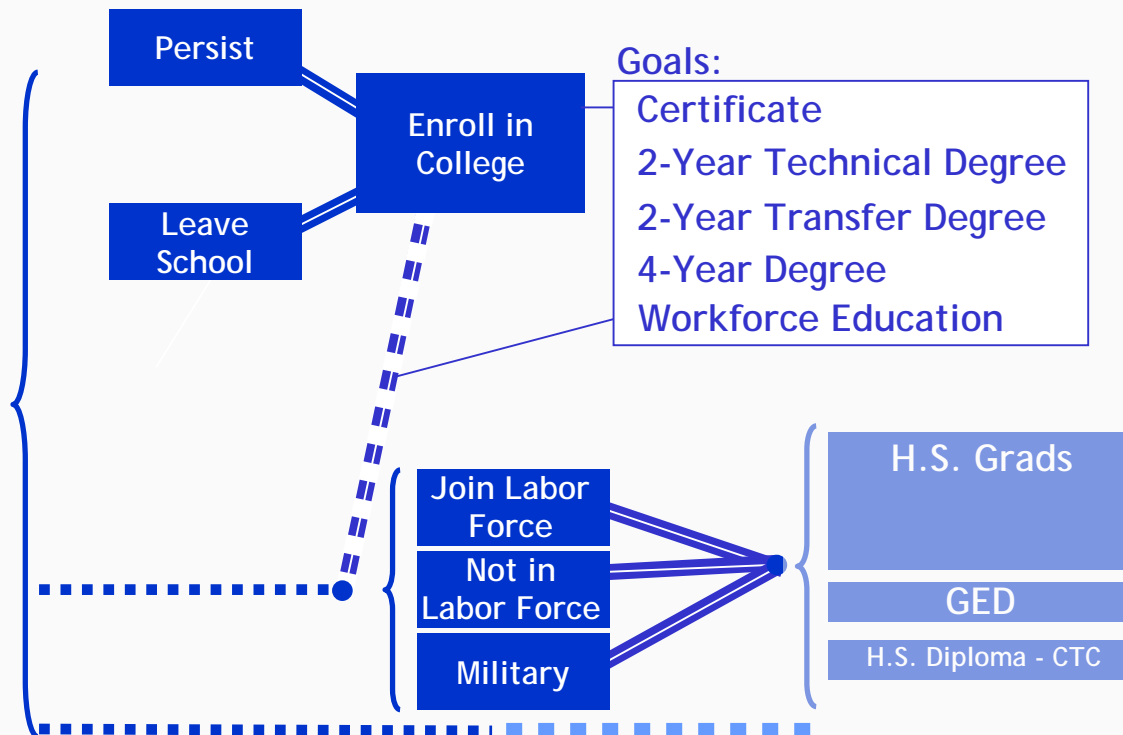
Bachelor's Degrees Awarded

By Race and Ethnicity, 2003-04



Source: HECB, Integrated Postsecondary Education Data System (IPEDS).

Workforce Education



Workforce Education Programs

For Adults in Washington State

Programs for Adults	Number of Participants 2003-04	Program Completion Rate	Median Age	Employment Rate
CTC Job Preparatory	82,216	58%	30	82%
Private Career Schools	33,069	72%	27	77%
Apprenticeship	12,066	43%	27	87%
Workforce Investment Act Dislocated Worker Program	15,531	na	42	82%
CTC Worker Retraining Program	16,356	51%	40	71%
Programs for Adults With Barriers				
Work-Related Basic Skills	23,563	na	30	64%
Workforce Investment Act Adult Program	7,936	na	36	81%
Vocational Rehabilitation	29,724	49%	37	52%

Source: Workforce Training and Education Coordinating Board, 2005. *Workforce Training Results 2004*.

[\[www.wtb.wa.gov/wtr04.pdf\]](http://www.wtb.wa.gov/wtr04.pdf)

Post-program employment rates based on phone surveys of participants leaving programs during 2001-02.

Employment data include outcomes for those who do not complete programs.

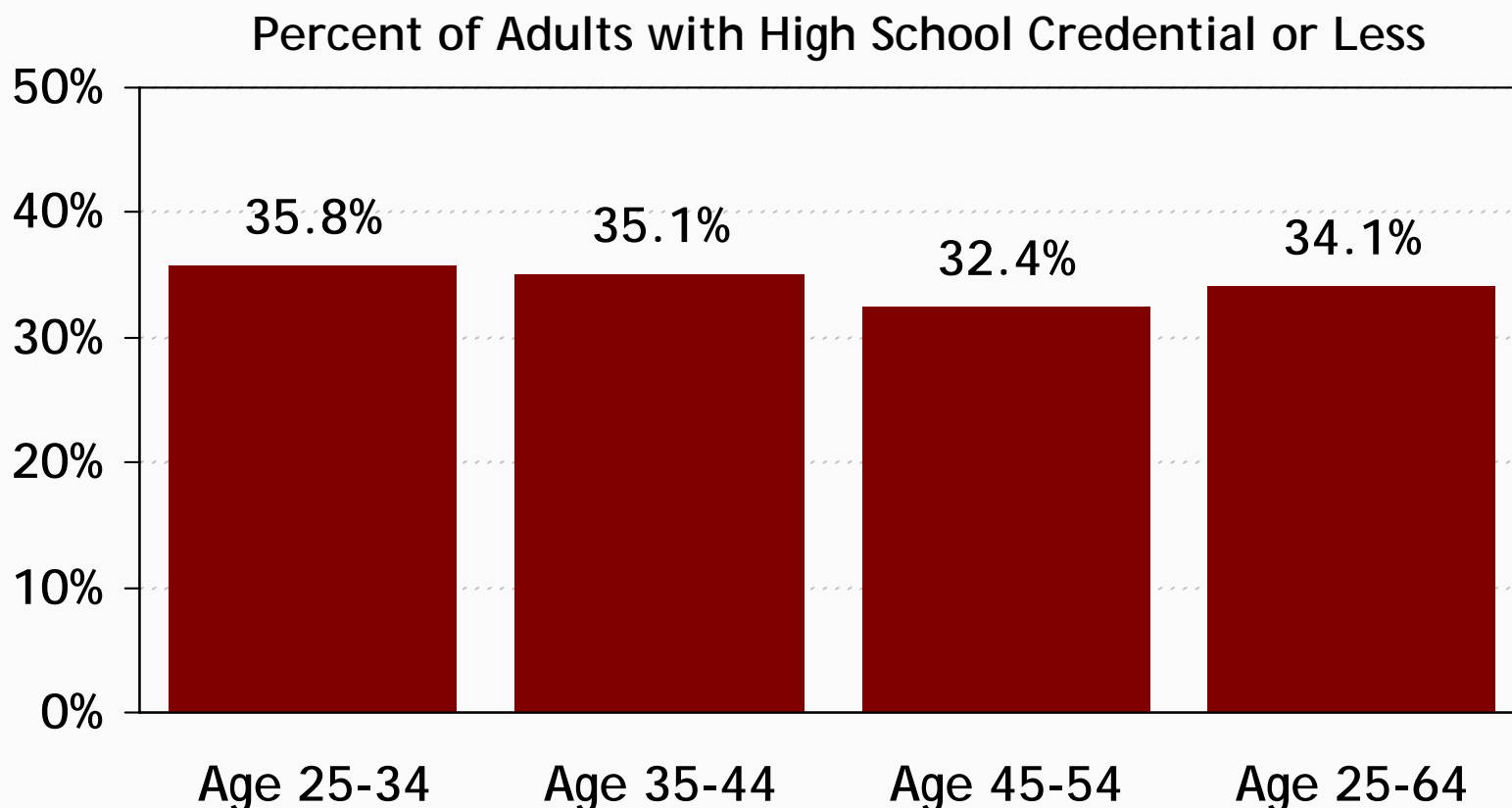
Vocational Rehabilitation completion rate is the percent of participants who were classified as rehabilitated upon

Leaving the program, i.e., those who had been working for 90 days.

	Native American	African- American	Asian and Pacific Islander	Hispanic
Share of Age 20-64 population	3%	3%	7%	7%
Participation Rate: Programs for Adults				
CTC Job Preparatory	3%	7%	8%	6%
Private Career Schools	2%	9%	7%	5%
Apprenticeship	3%	6%	3%	8%
Workforce Investment Act				
Dislocated Worker Program	3%	3%	5%	5%
CTC Worker Retraining Program	2%	7%	7%	8%
Participation Rate: Programs for Adults With Barriers				
Work-Related Basic Skills	3%	9%	16%	29%
Workforce Investment Act				
Adult Program	6%	7%	4%	11%
Vocational Rehabilitation	3%	7%	2%	6%

Source: Workforce Training and Education Coordinating Board, reports for targeted populations: www.wtb.wa.gov/his.pdf, www.wtb.wa.gov/asi.pdf, www.wtb.wa.gov/afr.pdf, www.wtb.wa.gov/nat.pdf

Over one-third of adults of prime working age do not have education beyond high school.



Source: U.S. Census Bureau, Census 2000 Summary File 3, Table PCT25. [www.census.gov/]

Outcomes:

Educational
Attainment

—
Job Skills

—
Employment
Success

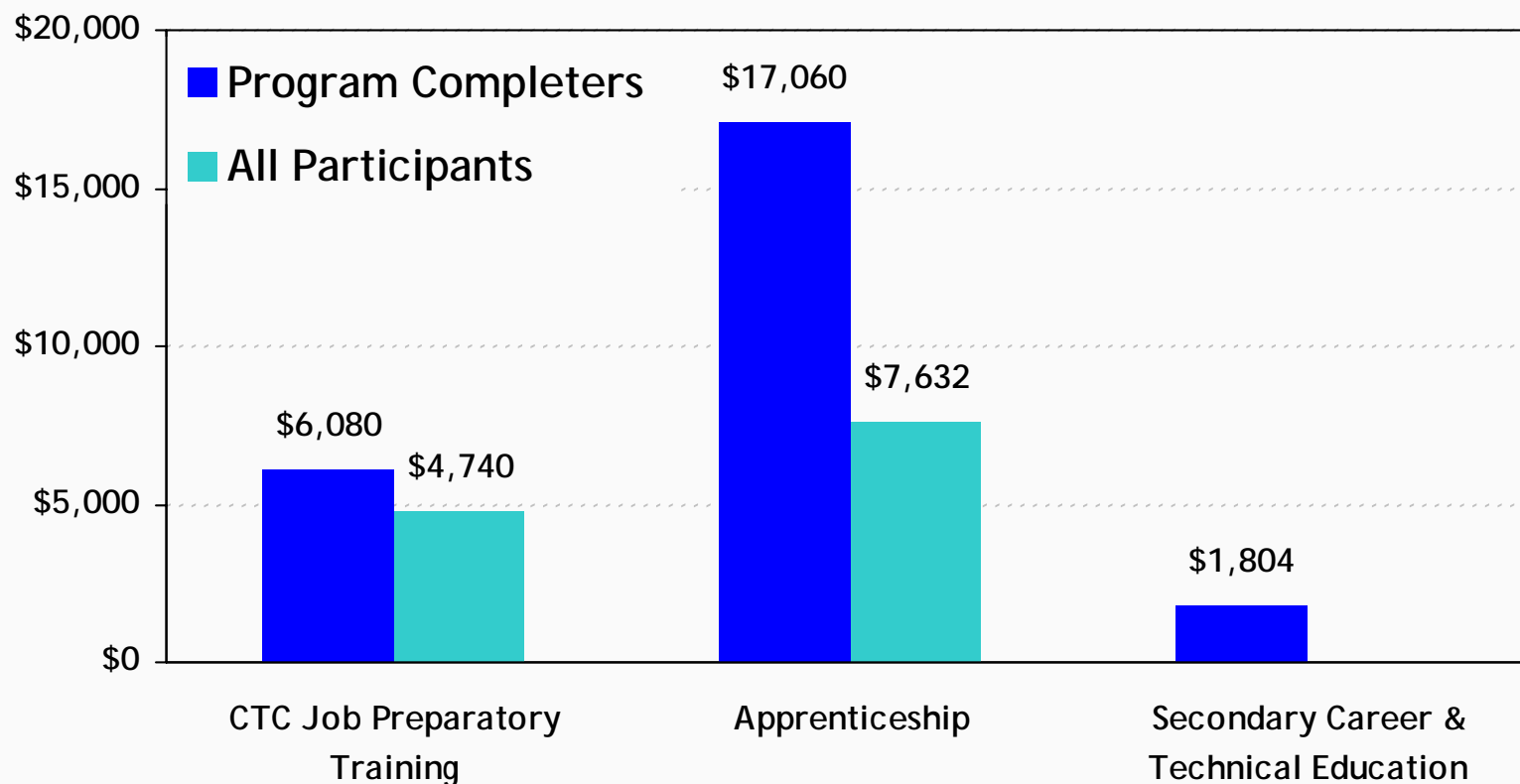
—
Income

—
Economic
Development

—
Involved
Citizens

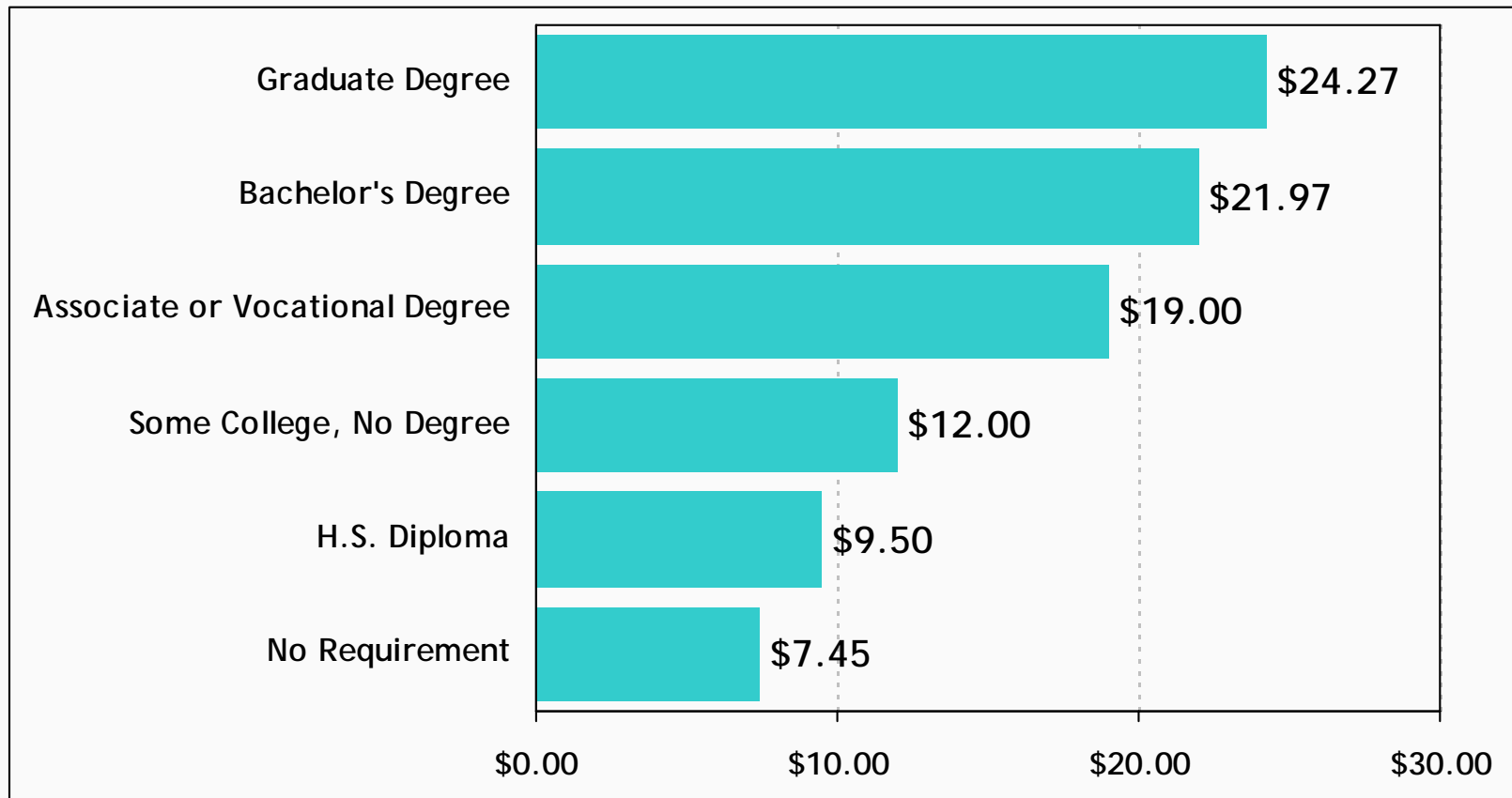
Outcomes

Workforce Education Long-Term Net Impacts



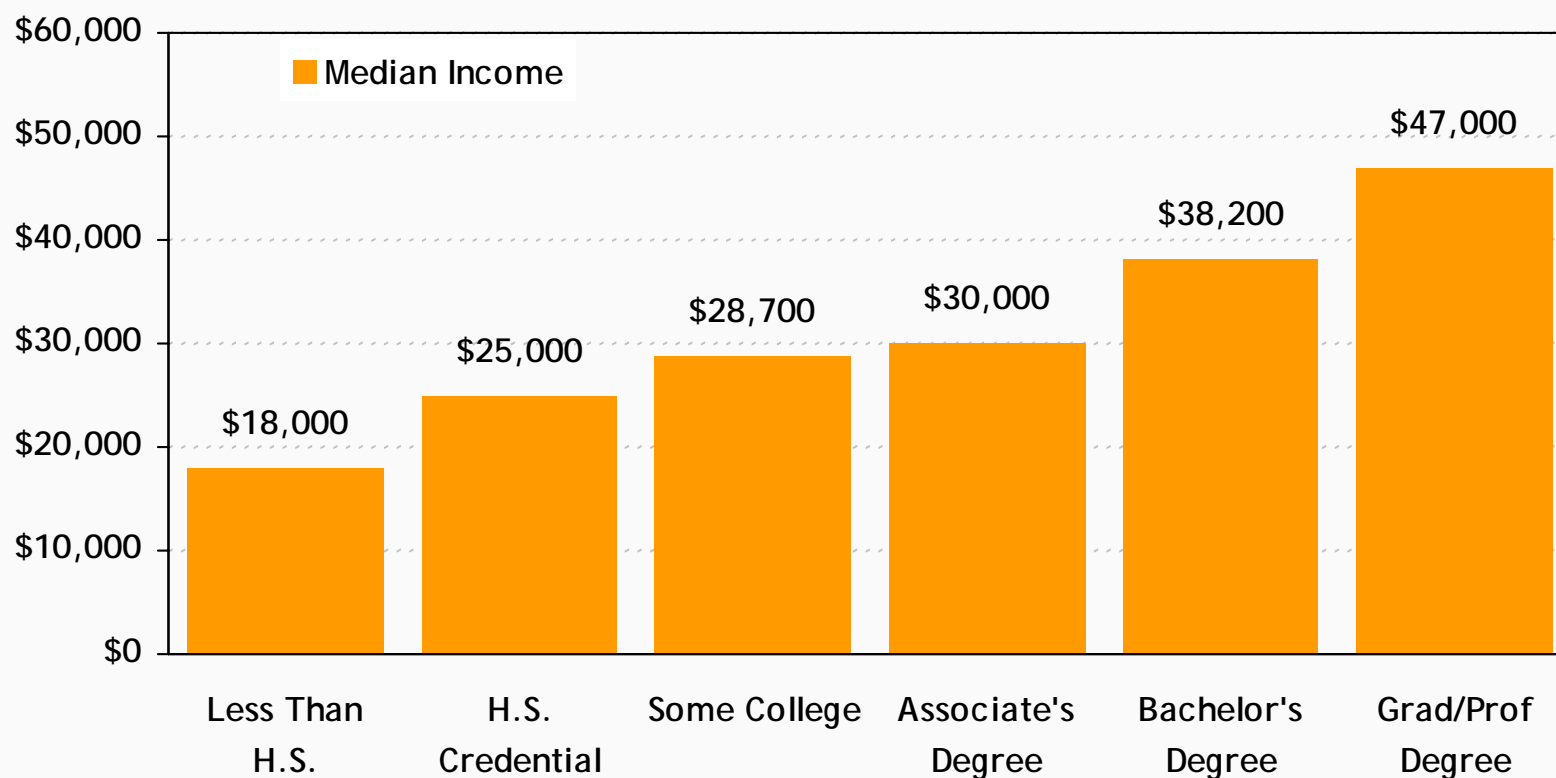
Source: Workforce Training and Education Coordinating Board, *Workforce Training Results 2004*.
[www.wtb.wa.gov/wtr04.pdf] Net impacts shown here are the increases in annual earnings attributed to the program participation (i.e., increases above that of the comparison groups). Long-term refers to impacts observed 8 to 11 quarters after leaving the program.

Education Requirements, Associated Hourly Wage Rates for Current Job Openings



Source: Employment Security Department, Washington State Job Vacancy Survey: April - May 2005

Personal Earnings and Educational Attainment Adults Ages 25 to 64



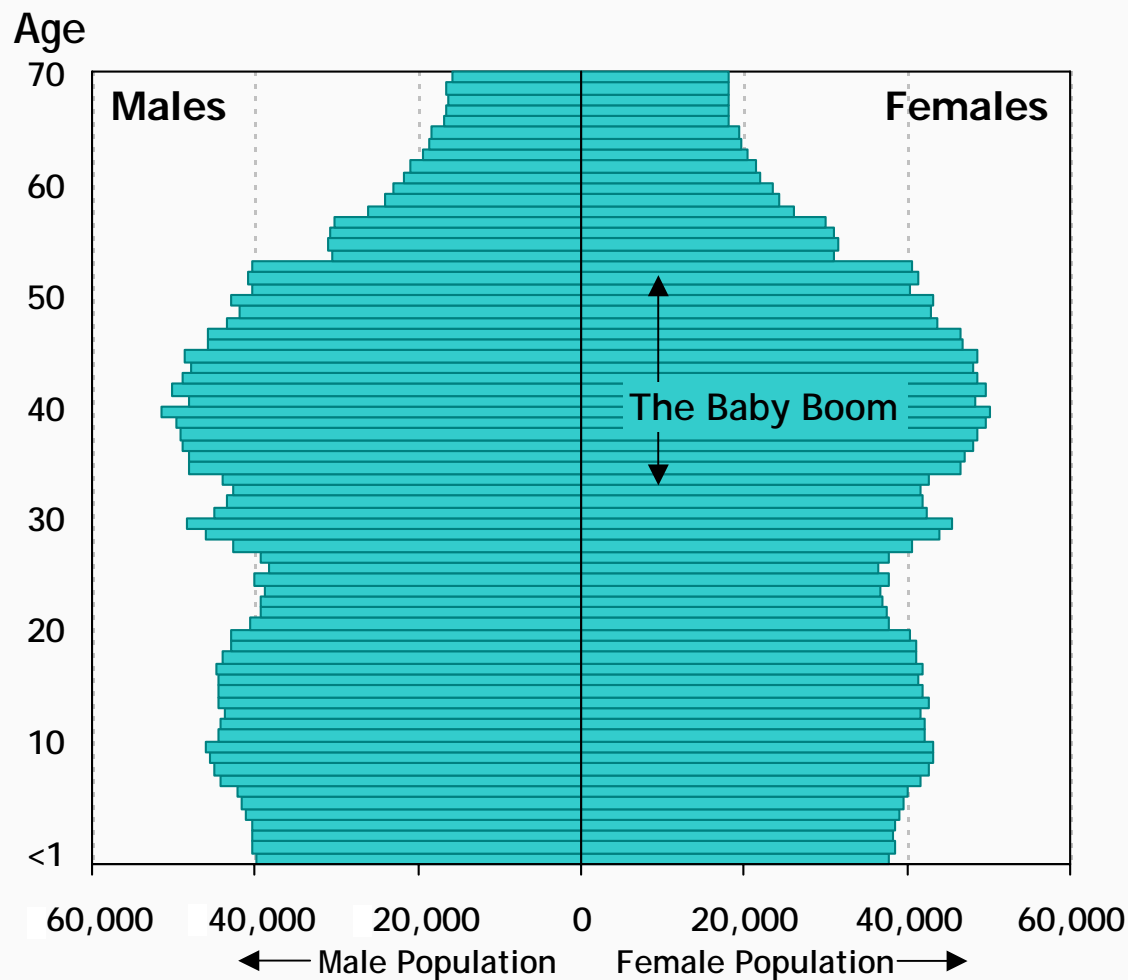
Source: U.S. Census Bureau Census 2000 5 Percent Public Use Microdata Sample (PUMS) for Washington. Analysis by OFM.

The Shift to Knowledge Jobs

- Workers will increasingly need skills that extend beyond basic academics to include more problem solving, critical thinking, interpersonal communication, occupational, and attitudinal skills.
- A two- or four-year college degree, other postsecondary credential, or on-the-job training is increasingly important for workers looking to secure a good job.
- More than two-thirds of workers in growing, good-paying occupations have postsecondary education. (office jobs, education/health-care jobs, technology jobs)

Source: Carnevale, Anthony P., and Donna M. Desrochers. 2003. *Standards for What? The Economic Roots of K-16 Reform*. Educational Testing Service. [acrnetwork.org/ViewDoc.aspx?ID=600076]

Distribution of Population by Age



Source: U.S. Census Bureau Census 2000 Summary File 1.

Conclusions

Observations/Conclusions

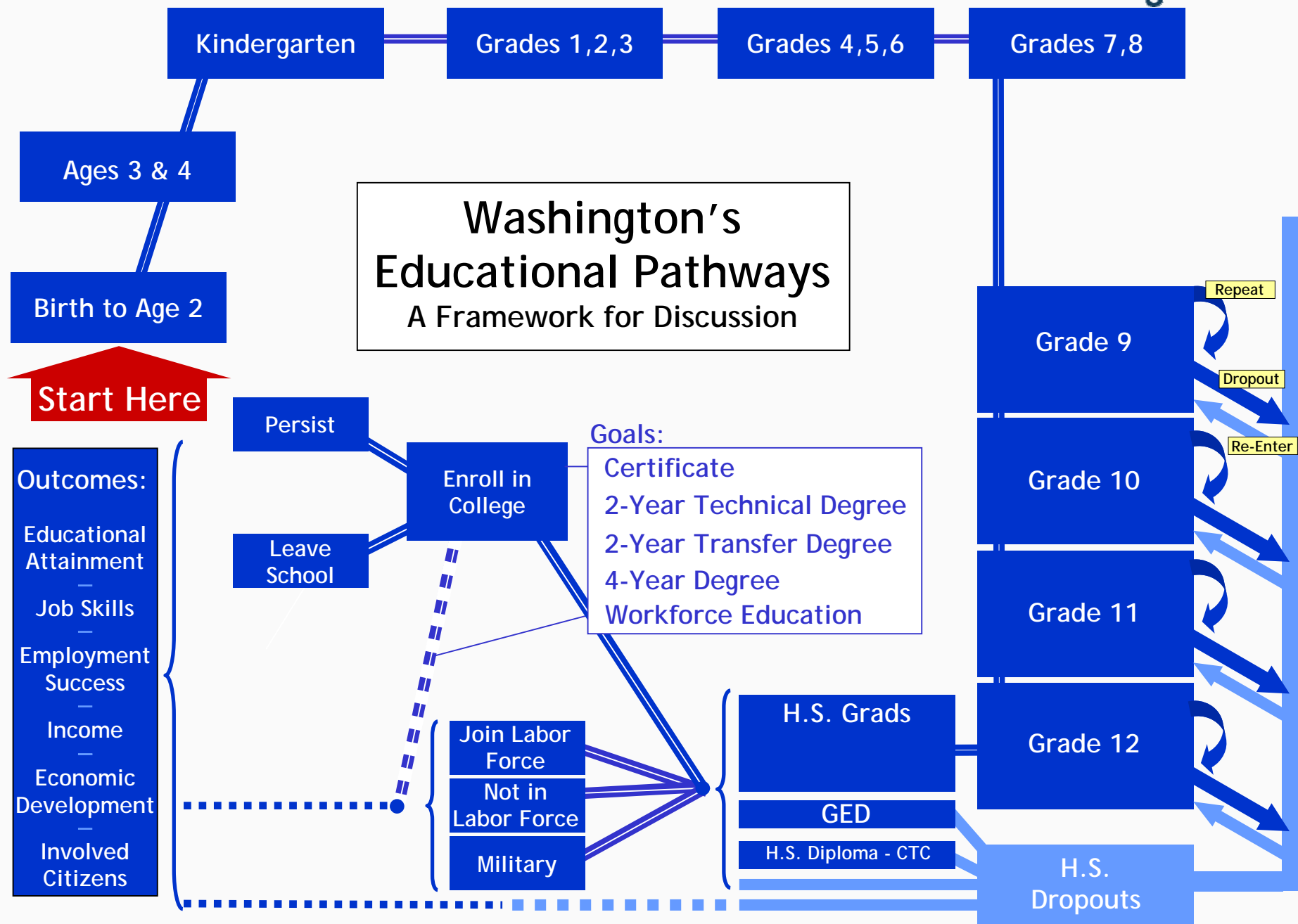
- Quality early learning is critical predictor of educational attainment
- Attainment gap begins early and persists
 - Early intervention strategies needed
- Ninth grade “bulge” needs more study
 - National study finds transition from 9th to 10th grade is now the weakest link on educational pathway (used to be 11th and 12th grades)
 - Texas study: 70-80% of 9th grade repeaters will not persist to graduation

Observations/Conclusions (cont.)

- Many high school graduates require remedial coursework in college
 - Early counseling can direct students to take rigorous courses they need
 - Need improved coordination of high school graduation requirements and college readiness
- One third of adult population has a high school degree or less
 - Expanded adult basic education, workforce training, ELL programs are needed

Observations/Conclusions (cont.)

- We need a student data system
 - Despite months of work, we still have many data gaps
 - Student data system would improve educational outcomes
- Our economic and civic well-being depends on significantly improving student success along the educational pathways



Linked Charts

Developmental Environment

- Early experiences and conditions of life and living
- Weight at birth
- Exposure to environmental hazards such as lead
- Environmental stimulation necessary for cognitive development
- Hunger and nutrition

Source: Barton, Paul. 2003. *Parsing the Achievement Gap: Baselines for Tracking Progress*. Educational Testing Service.
[www.ets.org/Media/Education_Topics/pdf/parsing.pdf]

Home Learning Connection

- Parental expectations for academic achievement
- Reading to young children
- Attention to physical and health needs
- Amount of TV watching
- Parental availability

Source: Barton, Paul. 2003. *Parsing the Achievement Gap: Baselines for Tracking Progress*. Educational Testing Service.
[www.ets.org/Media/Education_Topics/pdf/parsing.pdf]

The Early Years are Learning Years

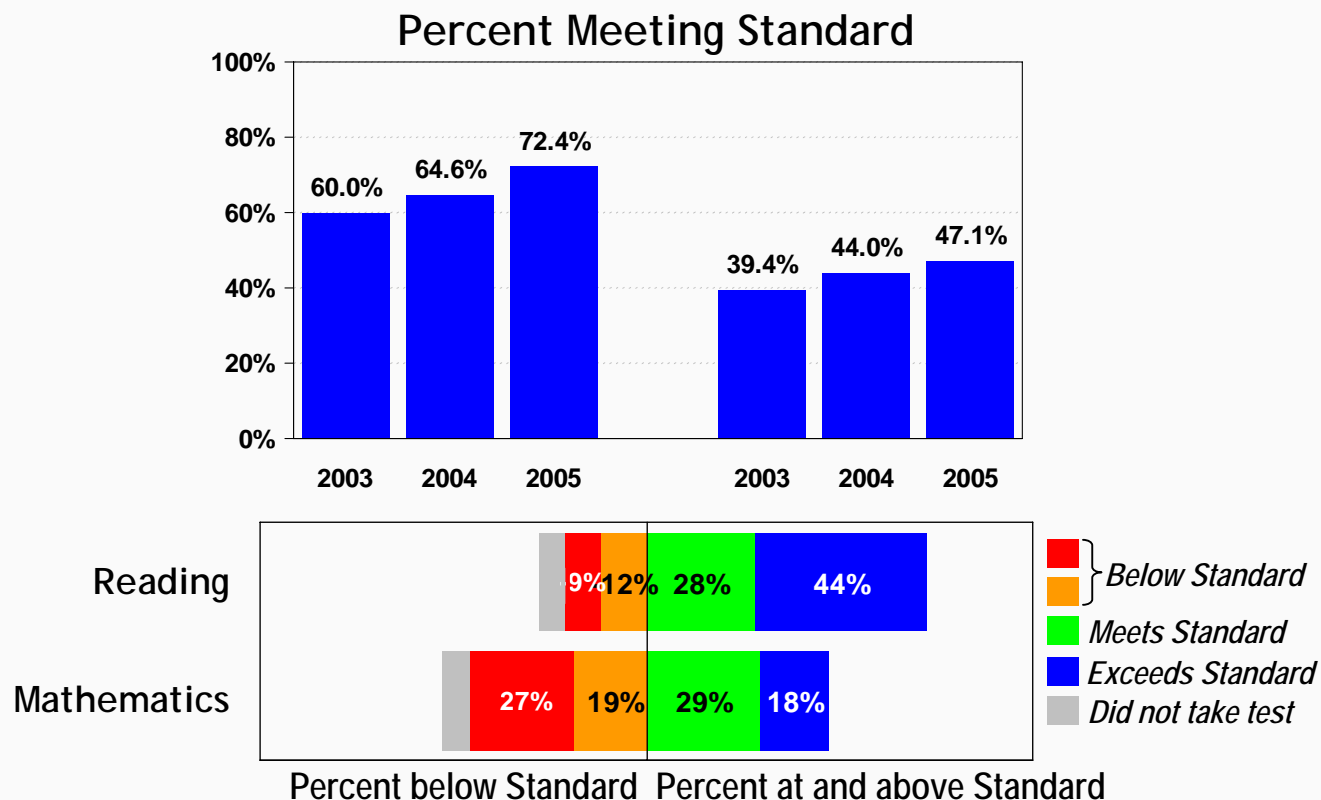
- The human brain develops more rapidly in the first five years of life than at any other subsequent period.
- A child's ability to pay attention, stay focused, and follow directions emerges in the early years.
- Structured early learning fosters these abilities for later success in school and life.

Source: Head start, Early Head Start and Early Childhood Education and Assistance Programs in Washington State, Governor's Head Start - State Collaboration Office for Washington State, 2001-02. [www1.dshs.wa.gov/pdf/esa/dccel/hsstateprofile2001-2002.pdf]

Cites the following: Shonkoff, J. and Phillips, D. 2001. From Neurons to Neighborhoods: The Science of Early Childhood Development. Washington, D.C.: National Academy Press.

Bowman, Barbara T, M.S. Donovan, and M.S. Burns (eds.). 2000. Eager to Learn: Educating Our Preschoolers. Washington, D.C.: National Research Council.

10th Grade WASL Results



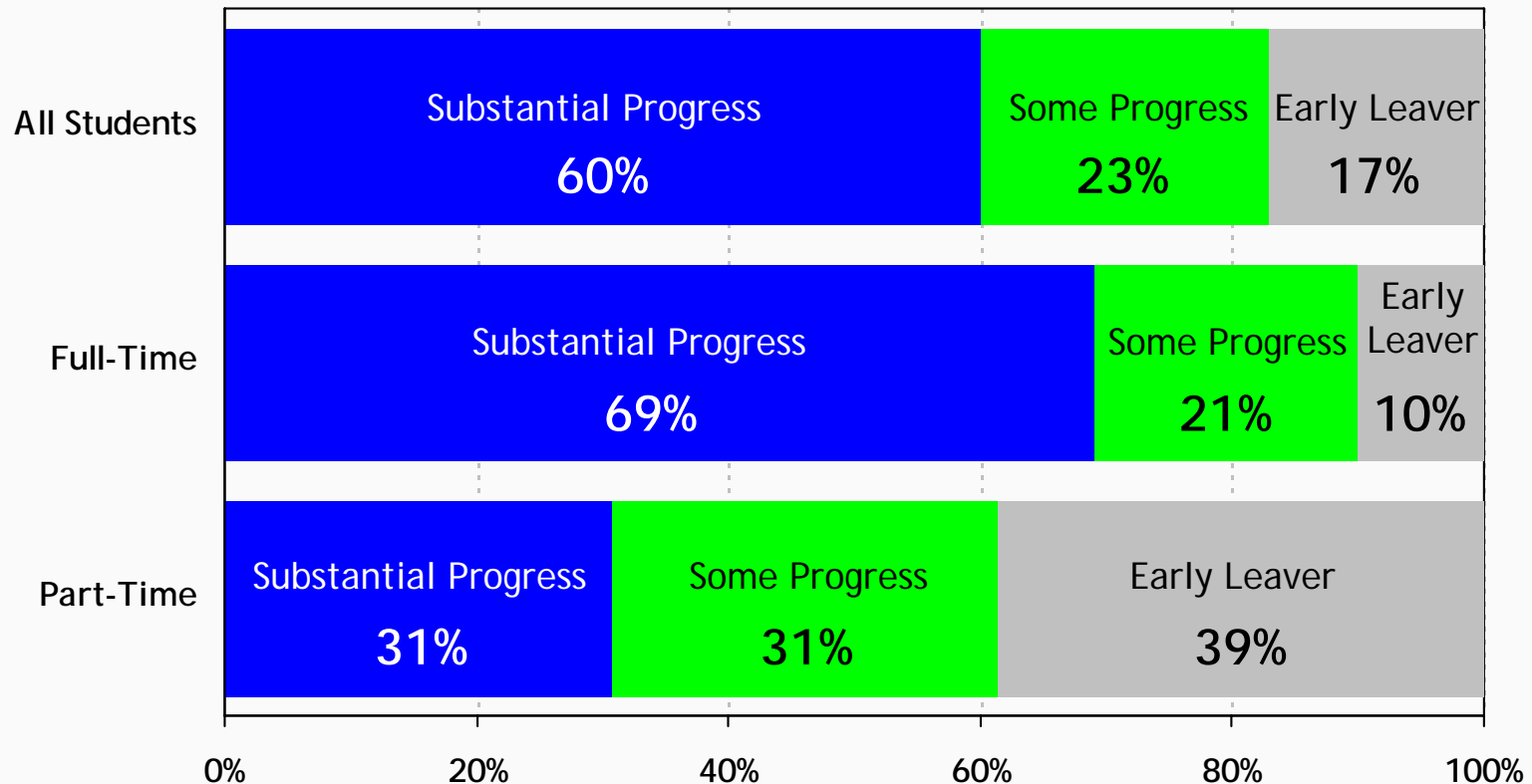
Progress of Degree-Seeking Students

Community and Technical Colleges

Substantial Progress = Students graduating or attending four or more quarters over the two-year period.

Some Progress = Students attending two or three quarters over the two-year period.

Early Leavers = Students attending only one quarter and not returning within two years' time.



Source: State Board for Community and Technical Colleges, *Academic Year Report, 2003-04*. December 2004.

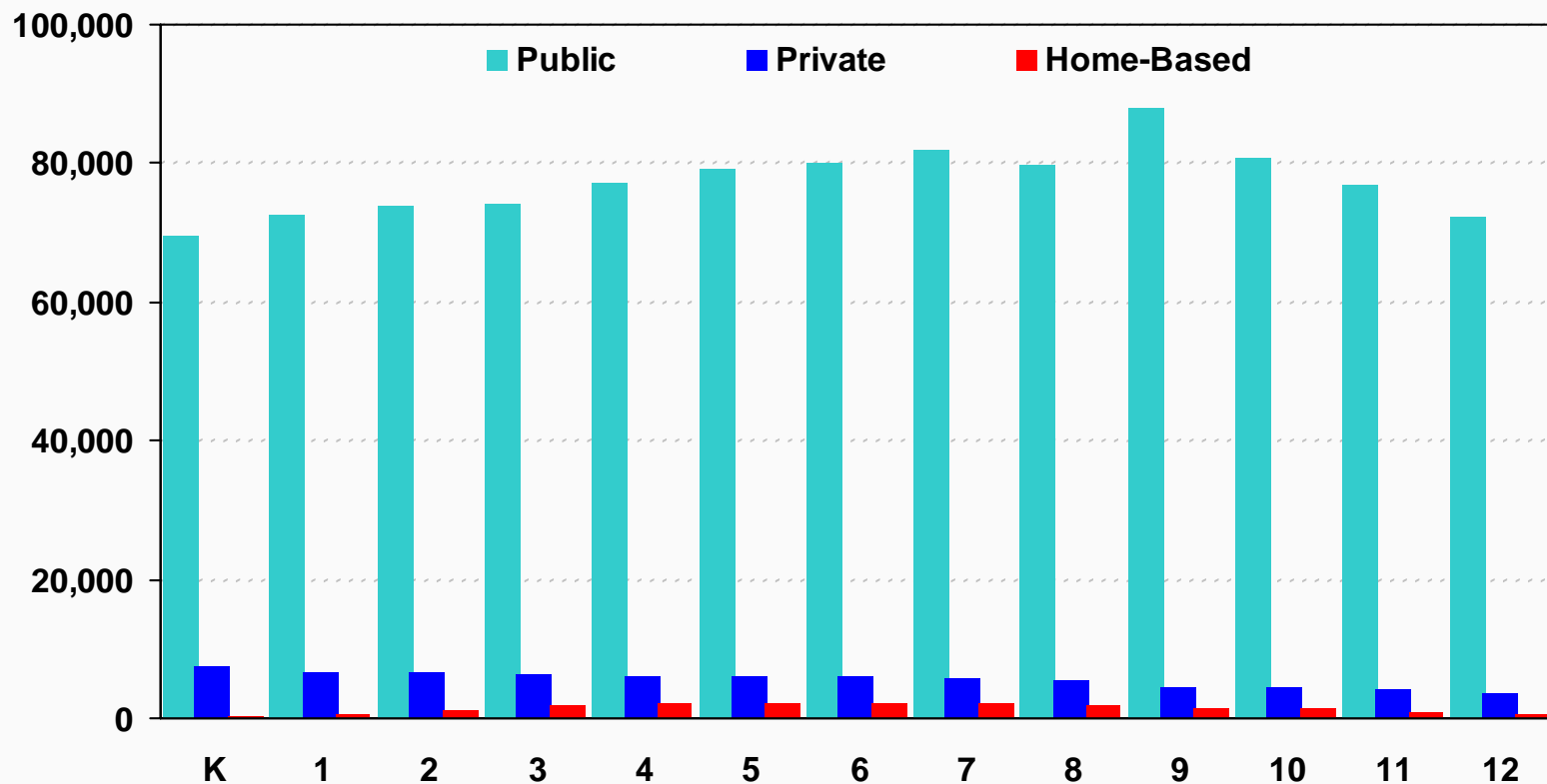
[\[www.sbctc.ctc.edu/data/AcadRpts/ayr0304/2003-04_Acad_Yr_Rep.pdf\]](http://www.sbctc.ctc.edu/data/AcadRpts/ayr0304/2003-04_Acad_Yr_Rep.pdf)

Starting cohort: 2002. More than one-third of all new students (48 percent of full-time and 24 percent of part-time) enroll with the intent of completing an associate degree (job preparatory or transfer degree) at their college.

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K-12 Enrollment, 2002-03

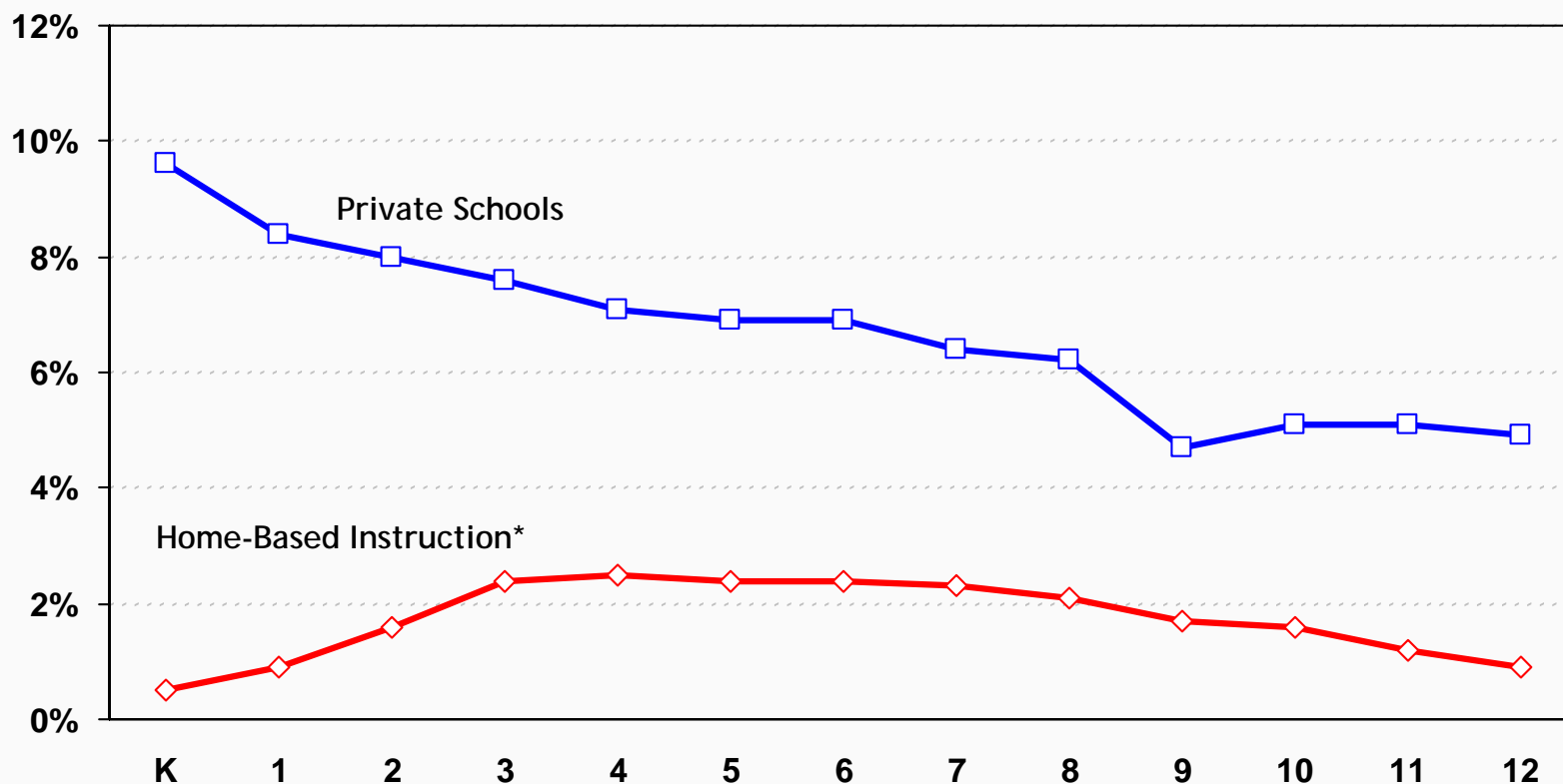
Public, Private and Home-Based



Data Source: OSPI. October headcount enrollments available at www.k12.wa.us/DataAdmin/.

K-12 Enrollment by Grade, 2002-03

Private and Home-Based as Share of Total

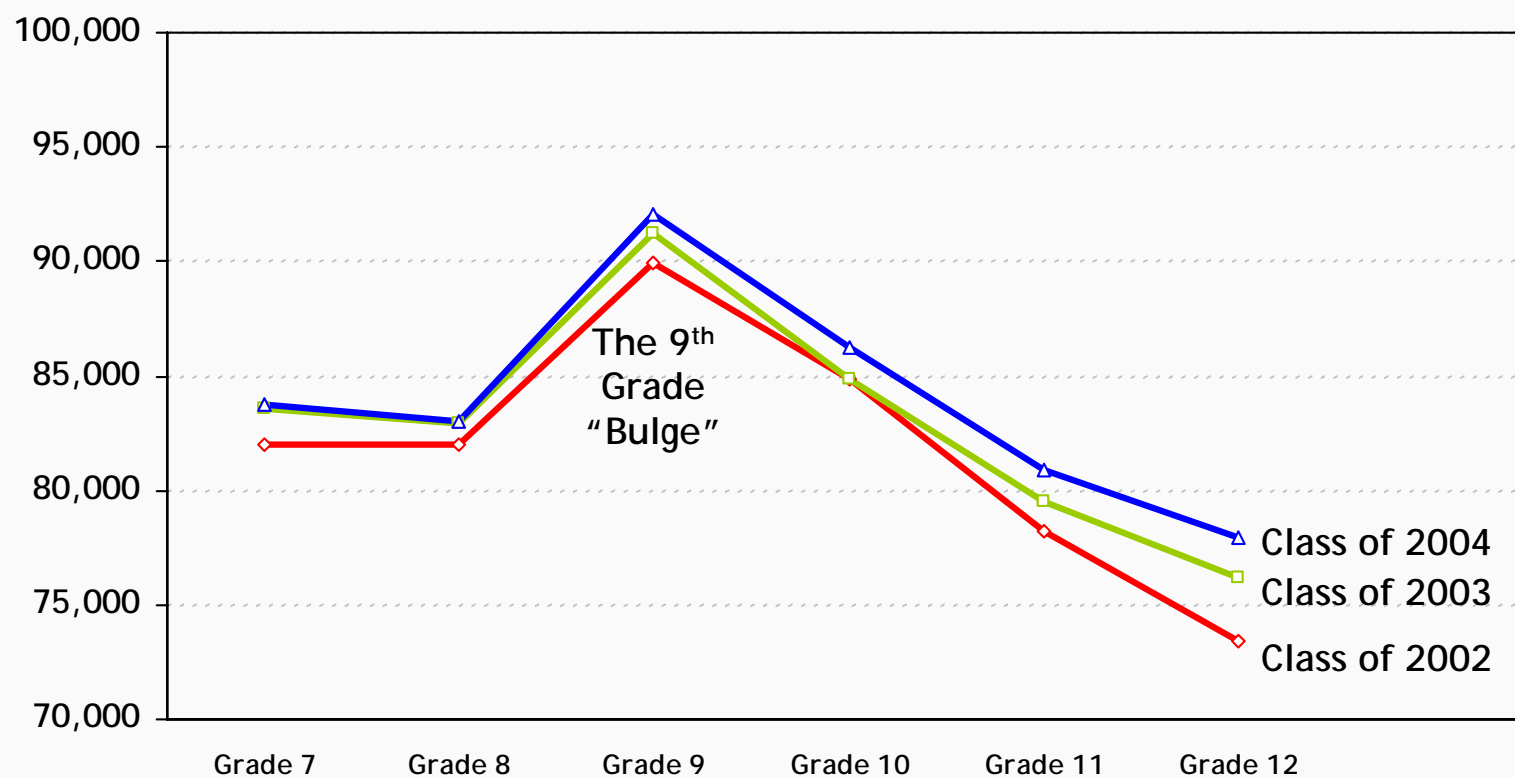


Data Source: OSPI. October headcount enrollments available at www.k12.wa.us/DataAdmin/.

Source: OSPI. *Home-Based Enrollment is that which is reported to OSPI.

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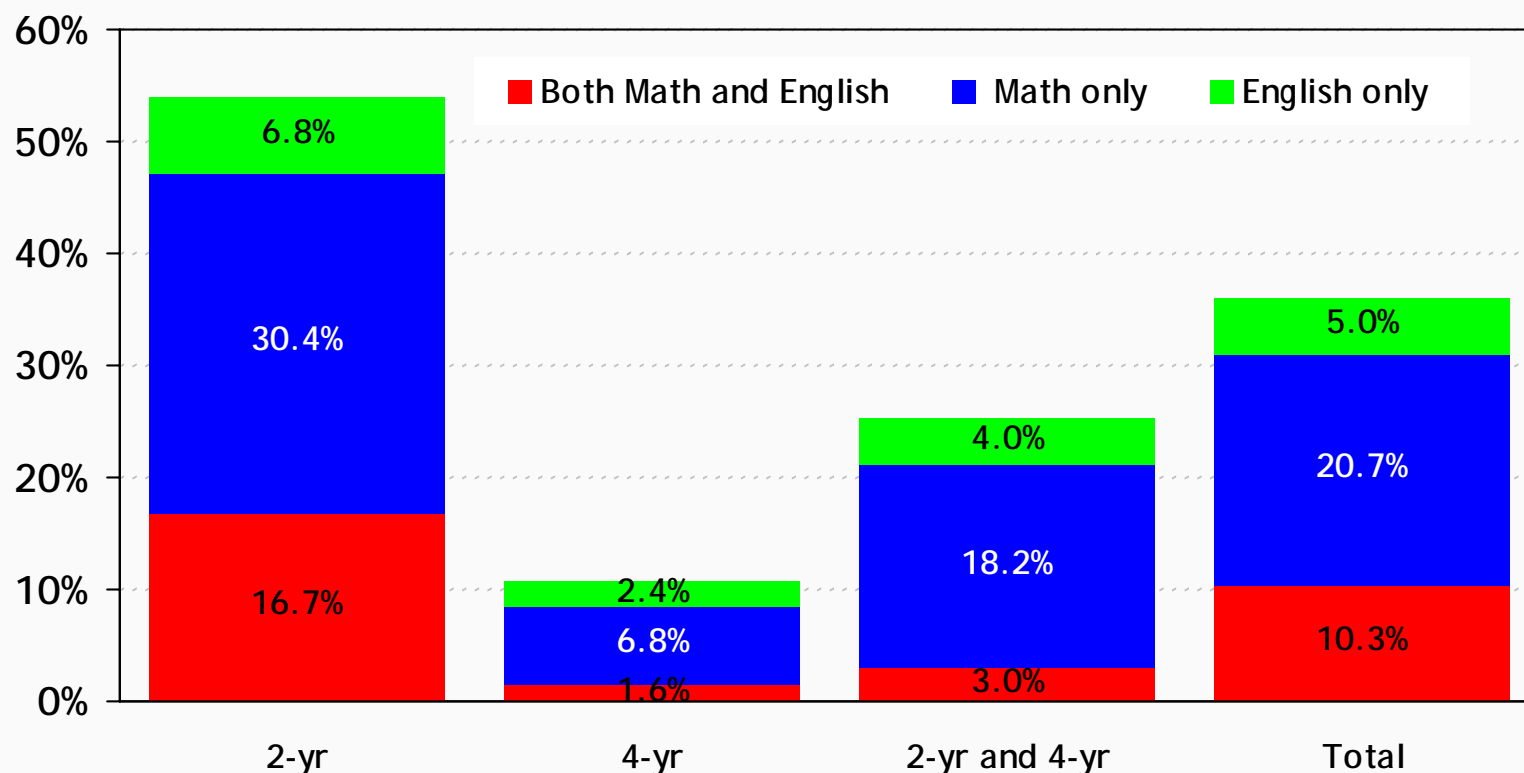
Public and Private Enrollments by Grade



Source: OSPI. October headcount enrollments. Available at www.k12.wa.us/DataAdmin/.

Remedial Coursework

2003 H.S. Completers* Entering College



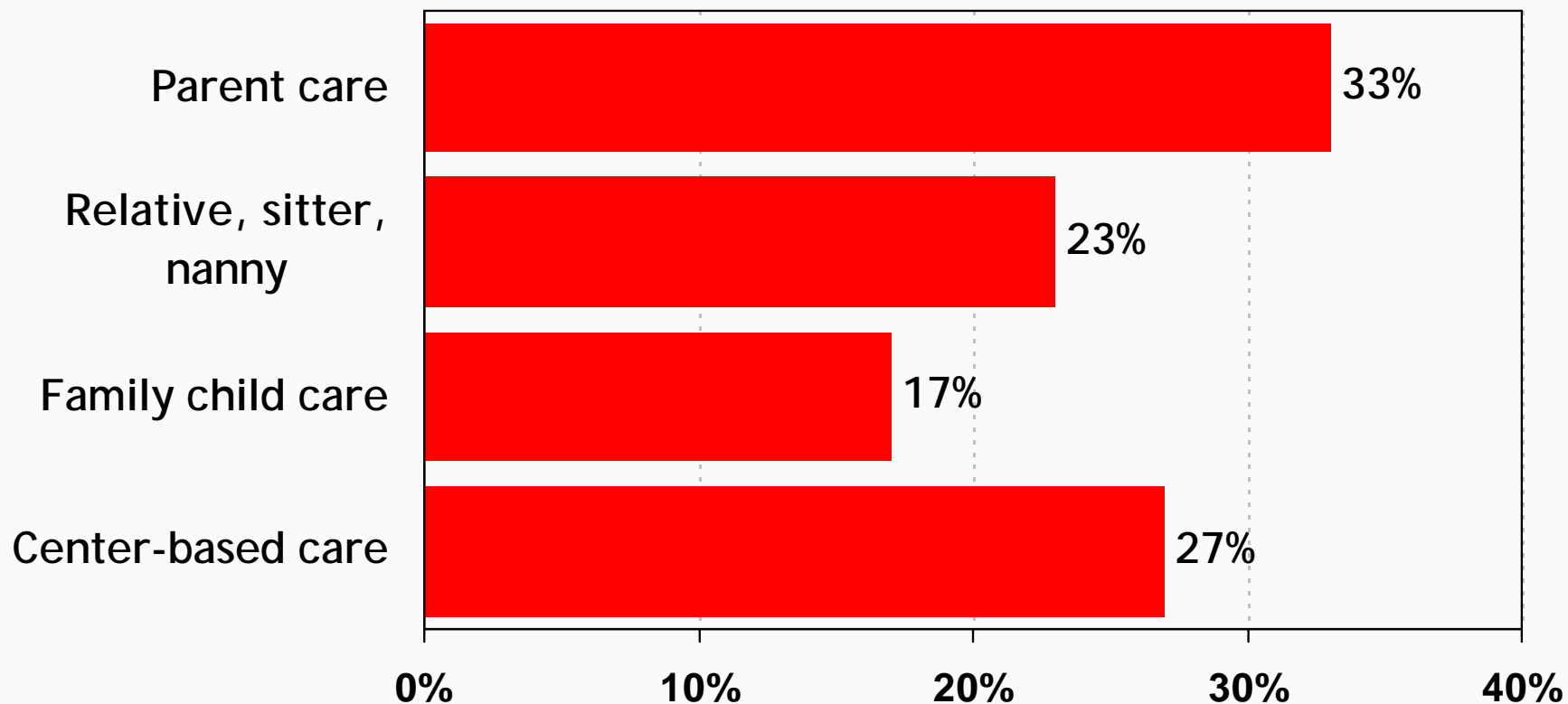
*Completers include on-time and delayed recipients of regular high school diplomas as well as IEP graduates, Adult Diploma recipients and GED recipients

Source: Social and Economic Sciences Research Center. *Washington State Graduate Follow-up Study: Class of 2003 All Graduates*. Olympia, WA: Office of the Superintendent of Public Instruction
[\[survey.sesrc.wsu.edu/gfs/pdffpapers/Class2003Y1AllGrads.pdf\]](http://survey.sesrc.wsu.edu/gfs/pdffpapers/Class2003Y1AllGrads.pdf)

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Primary Child Care Arrangements

For Children Under Age 5 With Employed Parent



Source: Sonenstein, Freya L., et al. 2002. "Primary Child Care Arrangements of Employed Parents: Findings from the 1999 National Survey of America's Families," Occasional Paper Number 59, The Urban Institute. Data for Washington.

[\[www.urban.org/UploadedPDF/310487_OP59.pdf\]](http://www.urban.org/UploadedPDF/310487_OP59.pdf)